

4.11.2 Bottles

T-116

Seven glass fragments from seven bottles were collected from T-116, Stratum Ij. These consists of three beverage bottles, one beer bottle, one soda bottle, one beer bottle, and one medicine vial. Of the three beverage bottles, two had an applied finish (1820-1890) and one had a tooled finish (1880-1920). The amber soda bottle was for a ginger ale by the Vincent Hathaway Co. of Boston, in business around ca. 1870-1900 (The Commissioners of Patents' Journal 1872:1641). The beer bottle was manufactured by the Linden Glass Co. of St. Louis, Missouri, who used the base mark on the collected bottle from 1886-1890. The mold-blown Lea and Perrins Worcestershire sauce bottle dates from 1877, when the firm of John Duncan & Sons (JDS on base) became the American agents to distribute the product to 1890, when the bottles began to be made by semi-automatic and later automatic bottle machines (BLM/SHA 2013). Therefore, the bottles from this test excavation all seem to date the last decades of the twentieth century, and the variety suggests domestic refuse.

T-117

Twenty-four glass fragments from a minimum of 10 bottles were collected from T-117, Stratum Ic. Only two bottles were complete, a medicine vial and a dark olive spirits bottle; the remaining material consists of fragments that cannot be dated to a narrow date range. Three bottles were made in a turn mold, used from ca. 1860-1920s and four clear bottle fragments post-date the 1870s (based on the color). The bottles may all date from the mid-nineteenth century and to the first decades of the twentieth century.

T-118

Nine glass fragments from a minimum of eight bottles were collected from T-118, Strata Ib (2 bottles) and Ic (6 bottles). The two bottles from T-118 are mold blown bottles but cannot be dated further. The bottles from Stratum Ic consist of a cone-shaped ink bottle, a milk glass jar lid, and four bottles of unknown function. Three bottles are made in a two-piece cup mold, the most common type of mold used from the 1870s on. Cone-shaped or conical ink bottles were made as early as the 1830s, but were the dominant form from the 1880s to the 1910s (BLM/SHA 2013_Diagnostic Shapes).

T-120B

Eleven bottle fragments from a minimum of seven bottles were collected from T-120B. One clear cologne bottle from the post-1870s period (based on color) was collected from the backdirt pile. From Stratum Ic-II, two black spirits bottles, and three bottles of unknown function were collected. The black glass bottles likely pre-date the 1890s, while a bottle with a two-piece cup mold probably post-dates the 1870s.

T-121

One cobalt blue and one amber bottle fragment were collected from T-121, Stratum Ic. Both bottles were made in a 2 piece-cup mold, the dominant form after the 1870s and one bottle has an applied lip finish, used from the 1820s to the 1890s.

T-123

One complete case gin bottle in 17 fragments was collected from T-123, Stratum Ie. The bottle is asymmetrical and may be mouth-blown or made in a dip-mold. Case gin bottles exported from other countries, especially the Netherlands, continued to be mouth-blown or made in an early dip-mold into the twentieth century (BLM/SHA 2013).

T-125

Eighteen glass fragments from a minimum of eight bottles were collected from T-125, four bottles from Stratum Id and four bottles from Stratum Ie. The fragments are generally small and have little evidence for manufacturing technique. One clear glass bottle fragment can be dated to post-1870, based on the color.

T-126

One Carters cone-shaped ink bottle and one black glass spirits bottle were collected from T-125, Stratum Ic. Cone-shaped or conical ink bottles were the dominant form from the 1880s to the 1910s, although they were made as early as the 1830s (BLM/SHA 2013 Diagnostic Shapes). The William Carter Company began as a stationary store in Boston in 1858, but began to make their own ink products during the Civil War. The company was acquired by the Dennison Company in 1975, who still market a few ink-related items under the Carter's name. During the twentieth century, it was probably one of the largest, if not the largest, ink producer in the United States, selling millions of bottles a year (Faulkner 2003:41). The black glass wine/beer bottle was made by R. Cooper & Co. at the Portobello Glass Works in Scotland. This company made bottles between 1866 and 1928; the black glass and separate base mold plate date this bottle to the nineteenth century, so the bottle was made between 1866 and 1900. (Museum Victoria 2013).

T-127

Three bottle fragments from two bottles and one white milk jar were collected from T-127, Stratum Ic. One black glass bottle can be dated to pre-1890s and a dark olive bottle with a tooled lip can be dated to the 1880s-1920s.

T-128

One aqua bottle base fragment was recovered from T-128, Stratum Ia. The bottle was made in a two piece-cup mold, the dominant mold used from the 1870s to the present; however, some cup molds were used as early as the 1860s.

T-129

Four complete bottles were recovered from T-129, Stratum II and one complete bottle and one medicine vial were collected from a feature utility in T-129. The four bottles from T-129, Stratum II are all olive green to dark olive spirits bottles, all of which are made in a turn mold, used from the 1860s to the 1920s. The bottle in the Feature Utility is an aqua boot/leathern polish bottle from the Frank Miller Co., New York, which was established in 1838 (Edward & Critten 1885:146). Although the advertisements for this polish emphasize its use as a boot and shoe polish, it could also be used on any type of leather, and may have been used at stables to polish horse or mule harness gear. This bottle was also found in T-132, T-140, and T-202 of West Kaka'ako.

T-130

Six complete bottles and two fragment from two bottles were collected from T-130, Stratum Ii. One amber beer bottle from the Buffalo Brewing Co., of Sacramento, California can be dated by the base mark, used by the San Francisco and Pacific Glass Works from 1876-1902. An aqua bottle embossed on the base was probably made by the Belleville Glass Co., Belleville, Illinois, which operated from 1882-1886. A medicine bottle for Dr. Jayne's Liniment, established by at least 1867, and advertised into the 1920s and 1930s (Fike 1987:135) was probably made from the 1870 to 1920s, based on the tooled lip finish. A soda bottle from Hollister & Co., Honolulu is similar to bottles pictured in Elliott and Goulds' (1998:112-113) Hawaiian bottle book, which they date from the 1890s to the 1910s. In this assemblage, one bottle is a mold-blown bottle with an applied lip finish (used from 1820 to 1890s), and five are mold-blown bottles with a tooled lip finish (used from 1880s to 1920s).

T-131

Twelve bottle/bottle fragments from a minimum of ten bottles were collected from T-131, Stratum Id. These include a fragment of a soda bottle, possibly from Hollister & Co., Honolulu, a Lea & Perrins Worcestershire sauce bottle. Armour & Co. were established in 1867. Milk jars such as this one likely contained beef extract or lard (Zumwalt 1980:29).

T-132

Thirty-three (33) glass bottle/bottle fragments from a minimum 30 bottles were collected from T-132, 2 bottles from Stratum Id, 27 bottles from Stratum Ie, and 1 bottle from Stratum Ie/II.

One brown bottle from Stratum Id could be dated to ca. 1820-1890 based on the applied lip finish. The other bottle fragment from this stratum could not be dated.

The 12 bottles in Stratum Ie consist of an ink bottle, six medicine bottles, one beer bottle, one beverage bottles, and three spirits bottles.

The ink bottle was an aqua cone-shaped bottle. This ink bottle shape was made as early as the 1830s, but were the dominant form from the 1880s to the 1910s (BLM/SHA 2013_Diagnostic Shapes). An amber beer bottle has a base mark of A B Co., a mark used by the American Bottle Co. from 1905-1929 (Whitten 2013).

A clear medicine bottle was for "Healy & Bigelow Indian Sagwa," a kidney regenerator. There was a similar bottle for this company in T-152. Healy & Bigelow established the Kickapoo Indian Medicine Co., of New Haven, Connecticut in 1881. The Sagwa brand was advertised in 1881, but by 1929 was advertised as the Kickapoo Sagwa by Wm. R. Warren, so the bottle in T-132 dates from 1881 to 1929 (Fike 1987:166). Odell (1998) dates the embossed bottles for Indian Sagwa from ca. 1884 to 1901.

A clear bottle is embossed with the words Candy Bro. Mfg. Co., St. Louis, MO. These bottles are often advertised as candy bottles on the internet, but the company was actually a drugstore owned by Welsey W. Candy (*Meyer Brothers Druggist* February 1918:91). The Hollister Drug Co. medicine bottle with a base mark of S B W Co. is dated to the late 1890s by Elliott and Gould (1988: 201). The Saltsburg Bottle Works of Saltsburg, Pennsylvania specialized in the making of druggist's ware and used the SBWCo. mark on their bottles from ca. 1890-1900 (Whitten 2013). Another large maker of druggist's ware was the Whittall, Tatum, & Co., of

Millville, N.J. One bottle has the base mark (W T & Co.) that this company used from 1857-1901 (Toulouse 1971:546; Whitten 2013).

One bottle is embossed Stephens & Son, Gloucester. J. Stephens of Gloucester, England, presented awards for his pickles, sauces and vinegar as early as 1880-81 (Melbourne International Exhibition 1882:332), but he also advertised his containers for jams, pickles, sauces, soups, and druggists' and chemists' wares (Chemist & Druggist 1901:445). Thus the bottle pictured may have contained some type of food, but more likely was a medicine bottle. It has an applied lip, indicating that the bottle was made pre-1890.

Nineteen bottles were collected from Stratum Ie/II, comprised of five medicine bottles, one shoe polish bottle, one cologne bottle, one condiment bottle, one beer bottle, one possible gin bottle, two soda bottles, and seven bottles of unknown function.

One amber medicine bottle was embossed P. D. & Co., a mark used for the Parke-Davis Co., a pharmaceutical company incorporated in 1874 and still in business today, originally in Detroit, Michigan (Hoefle and Lambert-Parke Davis 2000:30, 33). Most of the bottles with this mark pre-date 1930 (Whitten 2013). Dr. Thompson's Eye Water of Bridgeport, Conn. was invented by Dr. Isaac Thompson in 1795. The formula was purchased by John Thompson of New London, Conn. in 1830 and sold until 1939 (JAMA Ophthalmology 2010 Fike 1987:245). The bottle from T-132 is embossed with the place name of New London, so it post-dates 1830. It has a tooled lip, which narrows the date further to the 1880s to 1920s. A second Healy and Bigelow Sagwa bottle, the same type found in Stratum Ie, dates from ca. 1884 to 1901. Enos's Fruit Salt was a type of antacid introduced in ca. 1880 and still advertised in 1922. It was bottled at the Wood Bros. glass house in Barnsley, England (Fike 1987:161).

The Crown Dressing shoe polish bottle is for the Frank Miller Co., New York, which was established in 1838 (Edward & Critten 1885:146). The polish may have been also used to clean boots and shoes, but could also be used to polish harness and could be associated with horse or mule stables. This bottle was also found in T-129, T-132, T-140, and T-202 of West Kaka'ako.

One bottle is embossed with the name "Florida Water, Murray and Lanman Druggists, New York. The product was a cologne, first advertised around 1863, although it could have been introduced earlier (Sullivan 1994:89). The bottle had an applied lip, narrowing the date to 1863 to the 1890.

A light green condiment bottle was made for Yorkshire Relish, a brand of the Goodall, Backhouse and Co., established in 1858 in England (Grace's Guide 2007). The company used a light green bottle from 1858 to 1922 (Zumwalt 1980:181), and the applied lip on this bottle dates it to pre-1880.

A beer bottle was embossed S B G & Co., a mark used by the Streator Bottle & Glass Co., of Streator, Illinois from 1881-1905 (Toulouse 1971:461-463; Whitten 2013). Two soda bottles, one for Hollister & Co., Honolulu, and one for the Consolidated Soda Works, Honolulu were collected. The Hollister & Co. bottles with a semi-round base and rectangular letter O are dated to ca. 1900-1908 in Elliott and Gould (1988:112-113). The Consolidated Soda Co. is a Codd-stopper bottle, made in 1895 (Elliott and Gould 1988:79).

T-132 contains a wide variety of bottle types and bottle dates. The lower layer, Ie/II contains bottles with applied lip finishes (1820-1890) and tooled lip finishes (1880-1920s), while Id has a

mixture of bottles with applied lips, tooled lips, and ABM lips (post-1903). This may indicate that Stratum Ie/II has an older mixture of bottles (no ABM bottles) than Stratum Id. However, the upper stratum, Ib, has an applied lip, the oldest type of the three lip finishes mentioned. Therefore, there is no straight chronology of older to younger bottles through the three fill layers.

T-133

One aqua medicine bottle fragment, one complete blue medicine bottle, and one complete dark green bulk ink bottle were collected from the back-dirt pile from T-133. The aqua medicine bottle was for C.I. Hood & Co., Lowell, Mass Sarsaparilla Compound/Extract, popular from ca. 1870s to 1950s. The BLM/SHA (2013) Historic Bottle Identification site indicates that the style of the bottle found in T-133 (vertical embossing) dates from the 1880s to 1890s. The blue medicine bottle is for Wm. J. Bryan Apothecary, San Francisco. This business is listed in the 1875 San Francisco directory (San Francisco Genealogy 2013). Many of these companies ceased to exist or moved to nearby areas of California, like Oakland, after the 1906 San Francisco fire, so this bottle probably dates to ca. 1870s-1910. The ink bottle, a bulk or storage bottle, was for the Stafford Ink Co., which began to make ink under Dr. Stafford's name in 1869 (ODell 2013).

T-134

Fifteen glass fragments for a minimum of 13 bottles were collected from T-134, Strata Ib, (5 bottles), Ie, (1 bottle), and If (7 bottles). For Stratum Ib, there is an aqua soda bottle, a clear medicine vial, a dark olive spirits bottle, and bottle fragments for a brown, clear, and light green bottles. The aqua bottle matches the orientation and wording for the Honolulu Soda Water Co., which used these types of bottles from ca. 1910-1916 (Elliott and Gould 1978:114). The clear glass fragment can be dated to the post-1870 period. Stratum Ie has a green neck fragment made in a turn mold, dating from 1860 to the 1920s. In Stratum If, there are amber, green, and light green fragments, with little dating value, and two dark olive beverage bottles with an applied lip finish, used from ca. 1820-1890. There is also a light green medicine bottle from Keating's Cough Lozenges, Churchyard, London, a brand produced by Thomas Keating, who began a business in London in 1870. The cough lozenges seem to have been advertised during the mid to late 1800s. The lozenges contained morphine, ipecacuanha, extract of licorice, sugar, and tragacanth gum, and the recommended dosage was one or two lozenges at bedtime (Teahertz Co. 2013). It has an applied lip, which means it was probably manufactured before 1890.

T-136

Two complete bottles were recovered from T-136, Stratum Ih. They consisted of a dark brown beer bottle, and a dark olive beverage bottle. The brown bottle has AB embossed on the base, the mark used by the Adolphus Busch Glass Mfg. Co., St. Louis, Mo. from 1904 to 1907 or the American Bottle Co. (1905-1929) (Whitten 2013). The dark olive bottle was made in a turn mold, dating it to 1820-1920.

T-137

One complete olive spirits bottle was recovered from T-137, Stratum Ib. It has a beveled lip with a tooled Champagne lip finish, which was common in ca. 1900-1920. (BLM/SHA 2013)

T-138

Three complete bottles were collected from Stratum II of T-138. These consisted of an aqua medicine bottle, a clear medicine bottle, and a brown beverage bottle, and. The aqua bottle was for the Parke-Davis Co., a pharmaceutical company incorporated in 1874 and still in business today, originally in Detroit, Michigan (Hoefle and Lambert-Parke Davis 2000:30, 33). The clear medicine was for the Davis Vegetable Painkiller" brand of patent medicine, first bottled commercially in 1844. This medicine was sold as a general cure all for humans and animals; after the crack-down on patent medicines brought about by the Pure Food and Drug Act of 1906, this product was sold as a liniment, rather than an oral medicine (Fike 1987:130), thus our bottle probably dates from the 1870s (2-piece cup mold) to the 1910s. The brown beverage bottle has an applied lip with a two-piece mold, used from ca. 1870-1890s.

T-140

Four complete bottles and one base fragment were collected from T-140, Stratum Ih. The bottles consist of one aqua soda bottle, one light green soda bottle, two beverage bottles, and one shoe polish bottle. In 1863, two men, Hollister and Hyland founded the first soda water company, H & H, in Hawai'i. Later bottles are simply labeled Hollister & Co. (Elliott 1971:26). Elliott and Gould (1978:104) show only one bottle labeled H & H, dated to ca. 1869. The same mold was used in 1871, with the H & H removed, and the word Co. added, so the bottle from T-140 must date to ca. 1863-1871. The second soda bottle is from the Tahiti Lemonade Works Co., dated to ca. 1892 (Elliott and Gould 1978:124). In this year their plant moved from Nu'uuanu and King in downtown Honolulu to Sunny South (Young Street area in Pawa'a) in Waikiki (Elliott 197:32). The Crown Dressing shoe polish bottle is for the Frank Miller Co., New York, which was established in 1838 (Edward & Critten 1885:146). This bottle was also found in T-129, T-132, and T-202 of Kaka'ako West, and the product may have been also used to clean and polish harness and could be associated with horse or mule stables. The beverage bottle has an applied lip (1820-1890) and the spirits bottle has a champagne lip with a tooled beveled lip edge (1880s-1920s).

T-142

Two bottle fragments, one clear and one green, from two bottles were recovered from T-142, Stratum Ic. The clear fragment can be dated to post 1870.

T-143

Thirty-nine (39) glass fragments from a minimum of 12 bottles were collected from T-143 (8 bottles), Stratum Id (9 bottles), Stratum Id – Feature 1 (2 bottles), and Stratum Id/II (2 bottles). 1 bottle from Feature 1, and two bottles from Stratum Id/II. Thirty-five small fragments were found in Stratum Id, in various colors, amber, aqua, blue, brown, clear and olive. The clear fragments can be post-dated to 1880. Feature 1 of Stratum Id contained two aqua medicine vials. A brown and green beverage bottle fragments were found in Stratum Id/II. The Kina LaRoche brand was for an "invigorating tonic" to reduce fever. The brand was called Quina-LaRoche, indicating that the medicine had or claimed to have quinine, used for reducing the fever of malaria. It was advertised, at least, from the 1860s to the 1910s (Zoe 2011). One of the main ingredients was cocaine, and although advertised as a French medicine, it was actually made at

the New York office of the French company (The Pharmaceutical Era (Weekly) Vol. 39:50, January 9, 1908).

T-145

One brown bottle fragment was collected from T-145, Stratum Ic. It had a tooled lip finish, which dated it from the 1880s to the 1920s.

T-148A

Six bottle/bottle fragments from a minimum of four bottles were recovered from T-148A, Stratum Ib. The four bottles consist of an amber beer bottle, a black glass beverage bottle, an olive spirits bottle, and a dark olive spirits bottle. The amber bottle was made by the Streator Bottle & Glass Co., of Streator, Illinois, an early bottler of Busch beer; they used this mark from 1881 to 1905 (Whitten 2013). A black square bottle has a possible glass pontil. It may be a case gin, although it does not show the usual pointed corners. As noted previously, mouth-blown case gins were made and exported to American from Europe up until the 1920s. One olive spirits bottle may be a turn-mold or early dip-mold bottle and dates to the pre-1920s. The dark olive spirits bottle has a tooled, champagne lip, used from the 1880s to 1920s.

T-149

One clear medicine vial fragment and one complete clear medicine bottle were recovered from T-149, Stratum Ib. The medicine bottle is for the company of “P. Moller Ol Jecor Gador ver Christiania.” Peter Moller of Norway founded a company in 1854 in Christiania (Oslo) to make cod liver oil. The distinctive green bottles for this product were introduced in 1925/26, so the clear embossed, tooled lip bottle from T-149 must date from the 1870s to the 1920s.

T-152

One complete clear medicine bottle and one amethyst-tinted clear bottle lip fragment were collected from T-152, the first from Stratum Ic/Id, and the second from Stratum Ig. The clear medicine bottle from Stratum Ic/Id is for “Healy & Bigelow Indian Sagwa”, a kidney regenerator. Healy & Bigelow established the Kickapoo Indian Medicine Co., of New Haven, Connecticut in 1881. Fike (1987:166) noted that the Sagwa brand was advertised in 1881, but by 1929 was advertised as the Kickapoo Sagwa by Wm. R. Warren. Therefore, the bottle from T-152 dates from 1881 to 1929 (or earlier). The embossed bottles for Indian Sagwa from may date from ca. 1884 to 1901 (Odell 1998). The clear lip fragment from Stratum Ig has an amethyst tint, due to the addition of manganese used for clear glass from the 1820s to 1913.

T-153

One green bottle base was collected from T-153, Stratum IIa. It was made in a 2-piece cup mold and probably post-dates the 1870s.

Table 84. West Kaka'ako, T-116, Glass Bottles

Acc. # 116-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
7	T-116, St Ij	Bottle, Beverage	Base-neck	1	--	--	Green, Light	20.0+	6.3	Round	2 pc. cup		"863" – embossed on base "9" in center of
8	T-116, St Ij	Bottle, Soda	Base-neck	1	--	--	Amber	21.5+	5.5	Round	2 pc. cup	1870 – ca. 1900	"VINCENT/HATHAWAY / & CO. / BOSTON / GINGER ALE" – embossed on body; rounded bottom ginger ale bottle (The Commissioners of Patents' Journal 1872:164)
9	T-116, St Ij	Bottle, Beverage	Complete	1	Brandy	Applied	Blue, Light	24.0	6.5	Round	2 pc. cup	1820 – 1890	
10	T-116, St Ij	Bottle, Beer	Base-body	1	--	--	Amber	8.5+	6.5	Round	2 pc. post	1866 – 1890	"L G Co. / 15" - embossed on base; mark used by Lindell Glass Co., St. Louis, Mo. For beer bottles (BLM/SHA 2013)
11	T-116, St Ij	Vial, Medicine	Complete	1	Patent	Tooled	Clear	9.5	2.5	Round	2 pc. cup	1880-1920s	
12	T-116, St Ij	Bottle, Beverage	Complete	1	Double Oil	Applied	Olive	29.0	7.2	Round	2 pc. cup	1820-1890	
13	T-116, St Ij	Bottle, Sauce	Complete	1	Club Sauce	Applied	Green, Light	22.0	6.5	Round	2 pc. cup	1877-1890	"LEA & PERRINS" embossed on body vertically; JDS on base; mold-blown bottles date from 1877 to 1890

Table 85. West Kaka'ako, T-117, Glass Bottles

Acc. # 117-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
8	T-117, St Ic	Bottle	Base	1	--	--	Aqua	--	--	Rect./ square	--		Flat corners
9	T-117, St Ic	Bottle	Body	2	--	--	Amber	--	--	--	--		
10	T-117, St Ic	Bottle, Spirits	Base- body	1	--	--	Amber	--	7.5	Round	Turn	1860- 1920s	Push-up
11	T-117, St Ic	Bottle, Medicine	Neck-lip	1	--	--	Blue, Cobalt	--	--	--	--		
12	T-117, St Ic	Bottle, Medicine	Base- body	2	--	--	Brown -Light	--	--	Oval	2 pc. cup	1870s- post	
13	T-117, St Ic	Bottle, Medicine	Lip	1	--	--	Clear	--	--	--	--	1870s- post	
14	T-117, St Ic	Vial, Medicine	Complete	1	--	--	Clear	7.4	2.5 x 1.5	Rectan- gular	2 pc. cup	1870s- post	
15	T-117, St Ic	Bottle, Beverage	Body	2	--	--	Clear	--	--	Rect./ square	--	1870s- post	
16	T-117, St Ic	Bottle	Base- body	1	--	--	Green	--	--	--	--	1800- post	Kick-up base
17	T-117, St Ic	Bottle	Body	2	--	--	Green, Light	--	--	Rect./ square	--		
18	T-117, St Ic	Bottle, Spirits	Shoulder- lip	1	--	--	Green, Light	--	--	--	--		
19	T-117, St Ic	Bottle, Gin	Base	1	--	--	Green, Dark	--	7.3	Square	--		Case gin; rounded corners
20	T-117, St Ic	Bottle	Body	6	--	--	Olive	--	--	Oval	--		
21	T-117, St Ic	Bottle, Spirits	Base- body	1	--	--	Olive	--	7.4	Round	Turn	1860- 1920s	
22	T-117, St Ic	Bottle, Spirits	Complete	1	--	--	Olive, Dark	23.4	6	Round	Turn	1860- 1920s	Push-up base

Table 86. West Kaka'ako, T-118, Glass Bottles

Acc. # 118-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
2	T-118, St. Ie	Bottle, Ink	Complete	1	--	--	Aqua	6.3	6.3	Round	2 pc. cup	1870s- post	Cone-shaped ink; most common from 1880s to 1910 (BLM/SHA 2013_Diagnostic Shapes).
3	T-118, St. Ie	Bottle	Neck-lip	1	Laid- on-ring	--	Aqua	--	--	--	--		
4	T-118, St. Ie	Bottle	Body	1	--	--	Brown	--	--	--	--		
5	T-118, St. Ie	Lid	Complete	1	--	--	White	1	5.3	Square	--	1870s- post	Milk glass
6	T-118, St. Ie	Bottle	Neck-lip	1	Patent	Tooled	Clear	--	--	--	--	1880- 1920	
7	T-118, St. Ie	Bottle	Complete	1	Laid- on-ring	--	Aqua	20.5	5.5	Round	2 pc. cup	1870s- post	"P10" embossed on base
8	T-118, St. Ib	Bottle	Base	1	--	--	Aqua	--	6.5 x 6.5	Square	--		
9	T-118, St. Ib	Bottle	Base- body	1	--	--	Green	6.5+	4.8	Round	--		
10	T-118, St. Ie	Lid, Medicine	Complete	1	--	--d	Aqua	6	7.5	Round	2 pc. cup	1870s- post	Glass lid

Table 87. West Kaka'ako, T-120B, Glass Bottles

Acc. #120B-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
9	T-120B, Back Dirt	Bottle, Cologne	Complete	1	Patent	Tooled	Clear	9	3	Round	2 pc. cup	1870s-post	"Peck's Silver Medal Cologne, San Francisco, CAL." - embossed horizontally body
10	T-120B, Ic-II	Bottle, Spirits	Base (2); Body (7); Neck-lip (1)	10	--	--	Black	--	--	Round	--	pre-1890s	Kick-up
11	T-120B, Ic-II	Bottle, Spirits	Base (2); body (2); lip (1)	5	Brandy	Tooled	Black	--	7.5	Round	Turn	1890s-1920s	
12	T-120B, Ic-II	Bottle, Beverage	Base	1	--	--	Blue, Light	--	--	Round	--	1800-post	
13	T-120B, Ic-II	Bottle, Spirits	Lip	1	Champagne	--	Green, Light	--	--	--	--	1880s-post	
14	T-120B, Ic-II	Bottle, Beverage	Body	1	--	--	Olive, Dark	--	--	--	--		
15	T-120B, Ic-II	Bottle	Body	2	--	--	Olive, Dark	--	--	Rectangular	2 pc. cup	1870s-post	

Table 88. West Kaka'ako, T-121, Glass Bottles

Acc. #121-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
3	T-121, Ic	Bottle	Base-neck	1	--	--	Blue, Cobalt	14.0+	3	Round	2 pc. cup	1870s-post	Embossed on base: "2 1.2"
4	T-121, Ic	Bottle, Beverage	Shoulder-lip	1	Brandy	Applied	Amber	14.5	4.5	Round	2 pc. cup	1820 – 1890	Base: kick-up

Table 89. West Kaka'ako, T-123, Glass Bottles

Acc. # 123-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-123, St. Ie	Bottle, Gin	Complete	17	Laid- on-ring	--	Olive	--	6.5 x 6.0	Square	--		Case gin, "X" embossed on base, no visible seams and asymmetrical shape

Table 90. West Kaka'ako, T-124, Glass Bottles

Acc. # 124-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
3	T-124, St. Id, Fill	Bottle, Spirits	Neck-Lip	1	Brandy		Olive	--	--	--	2 pc.		Portion of seam near lip remains
4	T-124, St. Id, Fill	Bottle, Beer	Base	1	--	--	Amber	--	7.4	Round	--		M. J. H. embossed on base
5	T-124, St. Id, Fill	Bottle, Spirits	Base-body	1	--	--	Olive	--	7.5	Round	Turn		Push-up

Table 91. West Kaka'ako, T-125, Glass Bottles

Acc. # 125-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
6	T-125, St. Id	Bottle	Body	1	--	--	Aqua	--	--	--	--		
7	T-125, St. Id	Bottle	Body	4	--	--	Brown	--	--	--	--		
8	T-125, St. Id	Bottle	Body	1	--	--	Clear	--	--	--	--	1870s- post	
9	T-125, St. Id	Bottle	Base/ body	6	--	--	Olive, Dark	--	--	--	--	1800- post	

Acc. # 125-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
10	T-125, St. Id	Bottle	Body	1	--	--	Olive, Dark	--	--	--	--		
11	T-125, St. Id	Bottle	Neck	1	--	--	Olive, Dark	--	--	--	--		
12	T-125, St. Ie	Bottle	Body	1	--	--	Aqua	--	--	--	--		
13	T-125, St. Ie	Bottle	Body	1	--	--	Brown	--	--	--	--		
14	T-125, St. Ie	Bottle	Body	1	--	--	Green	--	--	--	--		
15	T-125, St. Ie	Bottle	Neck	1	--	--	Olive, Dark	--	--	--	--		

Table 92. West Kaka'ako, T-126, Glass Bottles

Acc. # 126-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
6	T-126, St. Ic	Bottle, Ink	Complete	1	Double ring	--	Aqua	6	6.8	Round	2 pc. cup	1880s- 1910s	Sick glass, Base: CARTERS 2 dimples on bottom, cone shaped (BLM/SHA 2013_Diagnostic Shapes).
7	T-126, St. Ic	Bottle, Spirits	Base/ body	2	--	--	Black	6.0+	8.5	Round	--	1866- 1900	Base: kick up; ". . . ORTOBBLLO" (?)" embossed on base; R. Cooper & Co., Portobello Glass Works, Scotland

Table 93. West Kaka'ako, T-127, Glass Bottles

Acc. # 127-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
2	T-127, St. Ic	Bottle	Base	1	--	--	Black	--	7.5	Round	No seam	pre- 1890s	Suction mark on base, glass is very thick and heavy,
3	T-127, St. Ic	Bottle	Neck-lip	1	Patent	Tooled	Olive, Dark	--	--	--	--	1880s- 1920s	
4	T-127, St. Ic	Jar	Base	1	--	--	White	--	--	--	--		Milk glass

Table 94. West Kaka'ako, T-128, Glass Bottles

Acc. # 128-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
3	T-128, St. Ia	Bottle	Base	1	--	--	Aqua	--	6.8	Round	2 pc. cup	1870s- post	

Table 95. West Kaka'ako, T-129, Glass Bottles

Acc. # 129-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-129, St. II	Bottle, Soda	Complete	1	Blob	Applied	Olive	23	7	Round	Turn	1860- 1920s	
2	T-129, St. II	Bottle, Soda	Complete	1	Brandy	Applied	Olive, Dark	23	7	Round	Turn	1860- 1920s	
3	T-129, St. II	Bottle, Soda	Complete	1	Blob	Applied	Olive, Dark	23	7	Round	Turn	1860- 1920s	
4	T-129, St. II	Bottle, Soda	Complete	1	Blob	Applied	Olive, Dark	23	7	Round	Turn	1860- 1920s	
5	T-129, Fea. Utility	Vial, Medicine	Base- neck	1	--	--	Clear	6.0+	1	Square	2 pc. cup	1870s- post	

Acc. # 129-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
6	T-129, Fea. Utility	Bottle, Boot polish	Complete	1	Patent	Tooled	Aqua	12.5	4	Square	2 pc. cup	1838- late 1800s	"Frank / Millers / Crown Dressing / New York / USA" - embossed on body horizontally; "20" - embossed on base (Edward & Critten 1885:146)

Table 96. West Kaka'ako, T-130, Glass Bottles

Acc. # 130-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
12	T-130, St. Ii	Bottle, Beer	Complete	1	Blob	Tooled	Green, Light	20.1	5	Round	2 pc. cup	1890s - 1910s	Embossed on body "HOLLISTER & co. / HONOLULU"
13	T-130, St. Ii	Bottle,	Complete	1	Brandy	Tooled	Amber	23.1	6.2	Round	2 pc. cup	1890s - 1920s	
14	T-130, St. Ii	Bottle,	Base	1	--	--	Aqua	--	7.7	Round	2 pc. cup	1882- 1886	Embossed on base "B G Co."; probably used by the Belleville Glass Co., Belleville, Ill. 1882-1886 (Whitten 2013)
15	T-130, St. Ii	Bottle, Spirits	Complete	1	Brandy	Applied	Green, Light	16.9	5.7 x 2.2	Oval	2 pc. cup	1820- 1890	Flask
16	T-130, St. Ii	Bottle, Medicine	Complete	1	Patent	Tooled	Aqua	14	4.9 x 2.7	Rectan- gular	2 pc. cup	1870s -post	

Acc. # 130-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
17	T-130, St. Ii	Bottle, Spirits	Complete	1	Patent	Tooled	Clear	14.2	4.6 x 3.5	Rectan- gular	2 pc. cup	1870s -post	Embossed on body: Dr. D JAYNE / LINIMENT / [2nd side] "COUNTERIRRIT ANT / PHILADa"
18	T-130, St. Ii	Bottle, Medicine	Complete	1	Patent	Tooled	Aqua	10.7	3.3	Round	2 pc. cup	1870s -post	Gradation marks on side; stippled base; embossed on base "V" in a circle
19	T-130, St. Ii	Bottle, Beer	Base- neck	1	--	--	Amber	25.7 +	7.3	Round	2 pc. cup	1876- 1902t	Embossed horizontally on base; "BUFFALO / BREWING CO. / SACRAMENTO/ CAL" ; on base "S.F. & P.G.W."; 1876-1902 mark used by the San Francisco & Pacific Glass Works

Table 97. West Kaka'ako, T-131, Glass Bottles

Acc. # 131-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
4	T-131, St. Id	Bottle, Spirits	Complete	1	Brandy	Applied	Black	22.5	7.5	Round	Turn	1820– 1890	
5	T-131, St. Id	Bottle, Spirits	Complete	1	Brandy	Applied	Olive	23.1	7	Round	Turn	1820– 1890	
6	T-131, St. Id	Bottle, Spirits	Complete	1	Brandy	Applied	Olive	23	7.3	Round	Turn	1820– 1890	
7	T-131, St. Id	Bottle, Spirits	Neck-lip	1	Brandy	Applied	Aqua	--	--	--	--	1820– 1890	

Acc. # 131-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
8	T-131, St. Id	Bottle, Condi- ment	Complete	1	Club Sauce	Tooled	Clear	18	5.3	Round	2 pc. cup	1850- 1920	"LEA & PERRINS" "WORCESTSHIR E SAUCE" – embossed on body, "J62D / S" embossed on base (BLM/SHA 2013)
9	T-131, St. Id	Bottle, Beverage	Complete	1	Blob	Applied	Clear	22	7.3 x 3.5	Rectan- gular	2 pc. cup	1840s- 1920s	Push-up base
10	T-131, St. Id	Bottle, Beverage	Base- body	1	--	--	Aqua	--	6	Round	2 pc. cup	1868- 1893	Embossed on body ...O.../ ...U..."; "Hollister & Co Honolulu" (Munsey 2010a:30b)
11	T-131, St. Id	Bottle, Soda	Neck-lip	1	English ring	Tooled	Clear	--	--	--	2 pc.	1890s- 1920s	
12	T-131, St. Id	Bottle, Beverage	Base- body	2	--	--	Olive	--	7.2	Round	2 pc.	1872- 1913	"2067" "N & C" embossed on base; base mark used by Nuttall & Co. Lancashire, England pre 1913
13	T-131, St. Id	Jar, Extract	Complete	1	Wide- mouth	--	White	3	4.2	Round	--		Milk glass; Embossed on base "ARMOUR & CO / PACKERS / CHICAGO" in shield outline
14	T-131, St. Id	Vial, Medicine	Complete	1	Sheare d	--	Clear	7	1.5	Rectan- gular	2 pc.	1800- 1870	

Table 98. West Kaka'ako, T-132, Glass Bottles

Acc. # 132-A	Prov.	Type	Portion	No.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
22	T-132, St. Id	Bottle	Lip	2	Ring	Applied	Brown	--	--	--	--	1820 –1890	
23	T-132, St. Id	Bottle	Body	1	--	--	Green	2.0+	2	--	--		
24	T-132, St. Ie	Jar, Medicine	Base- neck	1	Ext. thread	ABM	Clear	6.3	4	Round	2 pc. cup	1903- post	Wide-mouth jar; embossed on base "W. T. & Co. / 898" in arc; for Whittal, Tatum & Co., Millville, N.J.
25	T-132, St. Ie	Bottle, Medicine	Complete	1	Doubl e ring	Applied	Green, Light	9	4.8	Round	2 pc. cup	1820– 1890	Embossed on body vertically "...[S]TEPHENS SON & Co." GLOUCESTER"; English mfg. of pickles, jam, sauces and their bottles
26	T-132, St. Ie	Bottle, Ink	Complete	1	Ring	--	Aqua	6.3	6.3	Round	2 pc. cup	1880s- 1910	Cone-shaped; most common from 1880s- 1910 (BLM/SHA 2013_Diagnostic Shapes)
27	T-132, St. Ie	Bottle, Spirits	Base- shoulder	1	--	--	Green, Light	16.0 +	5.9	Round	Turn	1860- 1920s	Push-up base
28	T-132, St. Ie	Bottle, Beverage	Neck-lip	1	Crown	ABM	Clear	--	--	Round	2 pc. cup	1907- post	
29	T-132, St. Ie	Bottle, Spirits	Base- body	1	--	--	Olive	--	7.1	Round	Turn	1860- 1920s	Push-up base
30	T-132, St. Ie	Bottle, Spirits	Shoulder -lip	1	Patent	Tooled	Green, Light	--	--	Round	No seam	pre- 1920	

Acc. # 132-A	Prov.	Type	Portion	No.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
31	T-132, St. Ie	Bottle, Beer	Base- neck	1	--	--	Amber	27.1 +	7.3	Round	2 pc.	1905- 1929	Embossed on base "A B Co"; probably American Bottle Co., 1905-1929 (Whitten 2013)
32	T-132, St. Ie	Bottle, Beer	Complete	1	Brand y	Applied	Amber	29	7.5	Round	2 pc. cup	1881- 1905	"32 / SB & G Co" - embossed on base; for Streator Bottle & Glass Co., Streator, Ill.
33	T-132, St. Ie	Bottle, Soda	Complete	1	Blob	Applied	Aqua	19	6	Round	2 pc. cup	1894- 1910	"CONSOLIDATED / SODA WATER / WORKS CO LTD / HONOLULU H.I. / "ACME PATENT / 4 / SOLE MAKER/ DAN RYLANDS / BARNSELY" embossed horizontally on body: Codd bottle (Elliott and Gould 198:79)
34	T-132, St. Ie	Bottle, Condi- ment	Complete	1	Brand y	Applied	Clear	19.5	5	Round	2 pc. cup	1858- 1880	"Yorkshire Relish"; embossed on body horizontally; vertical on body side: "GOODALL BACKHOUSE & CO" Grace's Guide 2007; Zumwalt 1980:181))
35	T-132, St. Ie	Bottle	Complete	1	Doubl e oil	Tooled	Blue, Cobalt	20	1.2	Round	2 pc. cup	1870- 1906	"5" - embossed on base
36	T-132, St. Ie	Bottle	Complete	1	Doubl e oil	Tooled	Blue, Cobalt	17.5	3	Round	2 pc. cup	1870- 1906	"Y / 2 / 12" - embossed on base

Acc. # 132-A	Prov.	Type	Portion	No.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
37	T-132, St. Ie	Bottle, Medicine	Complete	1	Patent	Tooled	Amber	9	2.5 x 4.0	Rectan- gular	2 pc. key	1870- 1920s	"P/D. & CO /394 /5V6LCL510R" - embossed on base Parke, Davis & Co. (Whitten 2013)
38	T-132, St. Ie	Bottle, Medicine	Complete	1	Ring	Applied	Green, Light	17	6.2 x 3.8	Rectan- gular	--	1880- 1890	Embossed on body vertically "ENO'S FRUIT SALT"; on base "W. B. J."
39	T-132, St. Ie	Bottle, Medicine	Complete	1	Oil	Tooled	Green, Light	22	7.4 x 4.4	Rectan- gular	2 pc. cup	1884- 1901	Embossed on body sides vertically "HEALY & BEGELOW / INDIAN SAGWA" (Odell 1998)
40	T-132, St. Ie	Bottle, Cologne	Complete	1	Packer	Applied	Aqua	23	5.4	Round	--	1820- 1890	Embossed on body vertically "FLORIDA WATER / MURRAY & LANMAN / DRUGGISTS / NEW YORK"
41	T-132, St. Ie	Bottle	Complete	1	Packer	Tooled	Clear	31.5	6.1	Round	No seams	1890s- 1920s	Tall, bulbous bottle; possibly barber-shop bottle
42	T-132, St. Ie	Bottle	Complete	1	Ring	Applied	Green, Light	21.5	7.3 x 3.6	Rectan- gular	2 pc. Cup	1820- 1890	Fluted panels; possibly ketchup bottle
43	T-132, St. Ie	Bottle, Medicine	Base- body	1	--	--	Aqua	--	2.6	Round	2 pc. cup	1857- 1901	Embossed vertically on body "...BIGELOW / ... & CO"; for Healy & (Fike 1987:166)

Acc. # 132-A	Prov.	Type	Portion	No.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
44	T-132, St. Ie	Bottle, Medicine	Complete	1	Ring	Tooled	Green, Light	9.9	2.5	Round	2 pc. cup	1890s- 1920s	Embossed on body vertically "Dr. THOMPSON'S / EYE WATER / NEW LONDON. CONN" (Fike 1987:245)
45	T-132, St. Ie	Bottle, Medicine	Complete	1	Patent	Tooled	Clear	11.3	4.2 x 2.6	Rectan- gular	2 pc. cup	1890s- late	Embossed vertically on body "HOLLISTER DRUG CO. LTD. / FORT STREET / HONOLULU H.I."; on base "S B W CO" for Saltsburg Bottle Works, Saltsburg, PA (Whitten 2013); bottle dated by Elliott & Gould (1988:201) to late 1890s
46	T-132, St. Ie	Bottle, Medicine	Complete	1	Patent	Tooled	Clear	10	4.3	Round	2 pc. cup	1885- 1920s	Embossed horizontally on body "CANDY BROS [arc] / MFG CO / ST. LOUIS, MO" in an arc; druggist
47	T-132, St. Ie	Bottle	Complete	2	Ext. thread	--	Clear	--	4	Round	2 pc. cup	1870s- post	"CRE . . ." - embossed horizontally on body
48	T-132, St. Ie	Bottle, Medicine	Complete	1	Patent	Tooled	Clear	9.3	3.6	Round	2 pc. cup	1870s- post	Wide mouth
49	T-132, St. Ie	Bottle	Complete	1	--	Applied	Brown -Dark	14.4	6	Round	3-pc.	1820- 1890	Lip covered with metal cap

Acc. # 132-A	Prov.	Type	Portion	No.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
50	T-132, St. Ie	Bottle, Soda	Base- body	1	--	--	Aqua	14.0 +	5.6	Round	--	1900- 1908	Embossed on body vertically "...ER & Co. / ... ULU"; Hollister & Co. soda bottle; semi-rounded bottom (Elliott and Gould 1988:112-113)
51	T-132, St. Ie	Bottle, Gin?	Shoulder -lip	1	Oil	Applied	Olive	--	--	Square	--	1820 – 1890	
52	T-132, St. Ie/II	Bottle, Polish	Complete	1	Patent	Tooled	Aqua	12.5	4	Square	3 pc. cup	1838- late 1800s	"FRANK/ MILLER'S / CROWN / DRESSING / NEW YORK / USA" embossed on body (Edwards & Critten 1885:146)

Table 99, West Kaka'ako, T-133, Glass Bottles

Acc. # 133-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-133 Back pile	Bottle, Medicine	Base- neck	1	--	--	Aqua	21.0+	7.0 x 4.0	Rectan- gular	2 pc. key	1880s- 1890s	"APOTHECARIES" - embossed vertically on one body face; "HOODS / SARSA / PARILLA" embossed horizontally on one body face; "LOWELL MASS" embossed on body side vertically, "O I HOOD & C" on side vertically; suction mark on bottom, lip broken off
2	T-133 Back pile	Bottle, Medicine	Complete	1	Patent	Tooled	Blue	11.0	4.5 x 2.5	Rectan- gular	2 pc. cup	1870s- 1910 ca.	"Wm J BRYAN / APOTHECARY / SAN FRANCISCO" embossed vertically on body; stylized B near heel
3	T-133 Back pile	Bottle, Ink	Complete	1	Spout	Applied	Green, Dark	25.0	9	Round	2 pc. cup	1869- 1899	"STAFFORD'S / INK" embossed vertically on body; fire-damaged, bottle appears to have fire damage (Odell 2007)

Table 100. West Kaka'ako, T-134, Glass Bottles

Acc. # 134-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
11	T-134, St. Ib	Bottle	Body	2	--	--	Green, Light	--	--	--	--		Fragments from same vessel
12	T-134, St. Ib	Bottle, Spirits	Base	1	--	--	Olive, Dark	--	--	Round	No seams	1800-post	Push - up
13	T-134, St. Ib	Bottle	Body	1	--	--	Brown	--	--	--	--		
14	T-134, St. Ib	Bottle, Soda	Body	1	--	--	Aqua	10.0+	--	Round	--	1910-1916	Words on glass include "HONOLULU / WATER Co. LTD" embossed vertically on body (Elliott and Gould 1988:114); matches bottles for the Honolulu Soda Water Co. (Elliott and Gould 1978:114)
15	T-134, St. Ib	Bottle	Body	1	--	--	Clear	--	--	--	--	1870s-post	
16	T-134, St. Ib	Vial, Medicine	Complete	1	Sheared	--	Aqua	6	1.2 x 1.0	Rectangular	2 pc. cup	1870s-post	
17	T-134, St. Ie	Bottle, Beverage	Base-neck	1	--	--	Green	21.0+	7.7	Round	Turn	1860-1920s	
18	T-134, St. If	Bottle	Body	1	--	--	Amber	--	--	Round	--		Mass of glass measures about 12cm in length, 8cm width, has bright brown color
19	T-134, St. If	Bottle	Body	1	--	--	Green	--	--	--	--		

Acc. # 134-A-	Prov.	Type	Portion	No. frag .	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
20	T-134, St. If	Bottle	Body	1	--	--	Green, Light	12.0+	--	--	--		
21	T-134, St. If	Bottle, Beverage	Complete	1	Brand y	Applied	Olive, Dark	24	6.5	Round	2 pc.	1820– 1890	Push-up
22	T-134, St. If	Bottle, Beverage	Complete (almost)	2	Brand y	Applied	Olive, Dark	29	7.5	Round	Turn	1820– 1890	
23	T-134, St. If	Bottle, Medicine	Complete	1	Laid- on- ring	Applied	Green, Light	9	5.5 x 4.5	Oval	No seams	Mid- later 1870s	Embossed on “KEATING’S / COUGH LOZENGES / 79 ST. PAUL’S / CHURCHYARD / LONDON”

Table 101. West Kaka‘ako, T-136, Glass Bottles

Acc. # 136-A-	Prov.	Type	Portion	No. frag .	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-136, St. Ih	Bottle, Beer	Complete	1	Brand y	Tooled	Brown -Dark	29.8	7.5	Round	2 pc. cup	1905- 1929	“A B / 78” - embossed on base; for Adolphus Busch or American Bottle Co.
2	T-136, St. Ih	Bottle, Beverage	Complete	1	Packer	Applied	Olive, Dark	23.3	7.2	Round	Turn	1820– 1890	

Table 102. West Kaka'ako, T-137, Glass Bottles

Acc. # 137-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
2	T-137, St. Ib	Bottle, Spirits	Complete	1	Cham- pagne	Tooled- -	Olive	25.7	7	Round	2 pc.	1900- 1920	Kick-up base; beveled lip

Table 103. West Kaka'ako, T-138, Glass Bottles

Acc. # 138-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
6	T-138, St. II	Bottle, Medicine	Complete	1	Patent	Tooled	Aqua	15	5.5 x 6.0	Square	2 pc. cup	1874- 1920s	"PD & CO 114A" - embossed on base; for Parke Davis & Co. (Hoeffle and Lambert-Parke Davis 2000:30, 33)
7	T-138, St. II	Bottle, Beverage	Complete	1	Ring	Applied	Brown	24	6.5	Round	2 pc. cup	1870- 1890	Push-up base
8	T-138, St. II	Bottle, Medicine	Complete	1	Double ring	Tooled	Clear	11.8	3.7 x 1.8	Rectan- gular	2 pc. cup	1870- 1906	"Davis Vegetable Painkiller" – embossed on body (Fike 1987:130)

Table 104. West Kaka'ako, T-140, Glass Bottles

Acc. # 140-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
6	T-140, St. Ih	Bottle, Soda	Complete	1	Blob	Applied	Aqua	19	6.5	Round	2 pc. cup	1863- 1871	"H & H / HONOLULU" - embossed horizontally on body; for Hollister & Hyland, 1869-1871 (Elliott & Gould 1978:104)
7	T-140, St. Ih	Bottle, Spirits	Complete	1	English ring	Applied	Clear	16	4.5	Round	2 pc. cup	1820- 1890	
8	T-140, St. Ih	Bottle, Soda	Base- shoulder	1	--	--	Green, Light	8.5+	5.5	Round	2 pc. cup	1882- 1901	"TAHITI LEMONADE WORKS COMPANY HONOLULU; ACME PATENT / 4 / SOLE MAKER/ DAN RYLANDS / BARNESLE[Y]" - embossed horizontally on body (Elliott and Gould 1988:6
9	T-140, St. Ih	Bottle, Boot polish	Complete	1	Patent	Tooled	Clear	12.5	4.5 x 4.5	Square	2 pc. cup	1838- late 1800s	" "Frank Millers Crown Dressing New York, USA" - embossed horizontally on body (Edwards & Critten 1885:146)
10	T-140, St. Ih	Bottle, Spirits	Complete	1	Champ agne	--	Clear	22.0	6.5	Round	2 pc. cup	1880s- post	

Table 105. West Kaka'ako, T-142, Glass Bottles

Acc. # 142-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-142, St. Ic	Bottle	Body	1	--	--	Green	--	--	--	--		
2	T-142, St. Ic	Bottle	Base/ body	2	--	--	Clear	--	--	--	--	1870s- post	

Table 106. West Kaka'ako, T-143, Glass Bottles

Acc. # 143-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
30	T-143, St. Id, 58-66 cmbs	Bottle	Base	1	--	--	Clear	--	--	--	--	1870s- post	
31	T-143, St. Id	Bottle	Body	11	--	--	Amber	--	--	--	--		
32	T-143, St. Id	Bottle	Body	8	--	--	Aqua	--	--	--	--		
33	T-143, St. Id	Bottle	Base	1	--	--	Clear	--	5.3	Round	--	1870s- post	
34	T-143, St. Id, Fea. 1	Vial, Medicine	Body	1	--	--	Aqua	--	1.5 x 1.0	Rectan- gular	--		
35	T-143, St. Id, Fea. 1, 60-80	Vial, Medicine	Body	1	--	--	Aqua	--	1.5 x 2.5	Rectan- gular	--		
36	T-143, St. Id, Fea. 1, 60-80	Bottle	Body	2	--	--	Green	--	--	--	--		
37	T-143, St. Id	Bottle	Body	4	--	--	Olive	--	--	--	--		

Acc. # 143-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
38	T-143, St. Id	Bottle	Body	4			Clear	--	--	--	--	1870s- post	Fragments from same vessel
39	T-143, St. Id	Bottle	Body	2	--	--	Aqua	--	--	--	--		
40	T-143, St. Id/II, 100 cmbs	Bottle	Base- body	1	--	--	Brown	7.0+	7	Round	--	1800- post	
41	T-143, St. Id/II, 100 cmbs	Bottle, Medicine	Body-lip	1	Ring	--	Green	13.0 +	--	Round	2 pc. cup	1870s- post	"Laroche, Kina" - embossed horizontally on body; base: center seam; French company, but made in U.S.

Table 107. West Kaka'ako, T-145, Glass Bottles

Acc. # 145-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-145, St. Ic	Bottle	Base/lip	2	Ring	Tooled	Brown	--	7	Round	--	1890s- 1920s	

Table 108. West Kaka'ako, T-148A, Glass Bottles

Acc. # 148A-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
3	T-148A, St. Ib	Bottle, Spirits	Complete	1	Champ agne	Tooled	Olive, Dark	24.5	7	Round	Turn	1880s- 1920s	Push-up; beveled lip edge
4	T-148A, St. Ib	Bottle	Body	1	--	--	Amber	--	--	--	--		
5	T-148A, St. Ib	Bottle, Beer	Base	1	--	--	Amber	--	--	Round	2 pc. cup	1881- 1905	Embossed on base "S B G. & Co / 3"; Streator Bottle & Glass Co., Streator, Ill. (Whitten 2013)
6	T-148A, St. Ib	Bottle, Gin	Base	2	--	--	Black	--	7	Square	No seams	pre- 1890s	Possible glass pontil; edges flat; not usually case gin
7	T-148A, St. Ib	Bottle, Spirits	Base- body	1	--	--	Olive	--	8.8	Round	No seams	pre- 1920	Kick-up

Table 109. West Kaka'ako, T-149, Glass Bottles

Acc. # 149-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-149, St. Ib	Vial, Medicine	Base- neck	1	--	--	Clear	5.0+	1	Rectan- gular	--	1870s- post	
2	T-149, St. Ie	Bottle, Medicine	Complete	1	Patent	Tooled	Clear	15	7	Oval	2 pc. cup	1854- 1925	P. MOLLER OL JECOR GADOR VER CHRISTIANIA (Möller's 2010); cod liver oil, Oslo, Norway

Table 110. West Kaka'ako, T-152, Glass Bottles

Acc. # 152-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
2	T-152, St. Ic/Id	Bottle, Medicine	Complete but frag- mented	1	Patent	Tooled	Clear	22	--	Rectan- gular	2 pc. key	1884- 1901	"SAGWA" - embossed horizontally on one side; "HEALY & [B]IGELOW" (in caps) on other end; Indian on front of bottle; fragmented into several pieces (Odell 1998)
3	T-152, St. Ig	Bottle	Neck-lip	1	--	--	Clear	--	--	--	--	1820s- 1913	Manganese addition

Table 111. West Kaka'ako, T-153, Glass Bottles

Acc. # 153-A-	Prov.	Type	Portion	No. frag.	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-153, St. IIa	Bottle, Beverage	Base	1	--	--	Green	--	6	Round	2 pc. cup	1870s- post	

4.11.3 Miscellaneous Historic Artifacts

Miscellaneous historic artifacts consisting primarily of building materials were collected from 30 of the West Kaka'ako test excavations. Building materials, including two bricks, nails, a wood pipe stem, sewer pipe, and window glass, and various other items, including a rounded pebble, a plastic item, and a rubber item, were collected from T-117. One of the machine made bricks consists of composite material and has a textured surface with glazed face.

Building materials including two brick fragments were collected from T-119. One of the bricks may date from 1807 to 1860.

Building materials, including brick fragments, a rectangular stone block, and a marble mass, and various other items, including two waterworn pebbles, one waterworn cobble, and a metal tag, were collected from T-119A.

Building materials including two brick fragments were collected from T-120. One brick is a standard size manufactured between 1886 and 1918.

Building materials including one brick fragment and an electrical ceramic insulator were collected from T-121. One brick fragment and a composite possible electrical insulation pipe were collected from T-122. The brick is a standard size manufactured between 1918 and 1978. One ceramic electrical insulator was collected from T-123.

Building materials including one brick fragment and a corroded nail were collected from T-124. Also collected was a bone pipe stem or cigarette holder.

Five metal artifacts/fragments including a gold hoop earring, a spoon, a possible strap or hinge, a wire and a tubular rod, were collected from T-125. A brick fragment and window glass were also collected.

Building materials including one brick fragment, one complete brick, and a metal spike were collected from T-126. The complete brick is a standard size that was manufactured from 1918 to 1978 (Meide 1994:25); the brick fragment measurements are standard for bricks manufactured from 1886 to 1918.

Building materials including two brick fragments, a spade, a nail and a strap or hinge, and a glass dish or lamp base were collected from T-127. One complete brick, and a fragment were collected from T-129. The brick fragment measurements are standard for bricks manufactured from 1886 to 1918.

Household items including a woman or child's shoe, a marble, and a horseshoe were collected from T-130. Household items including a plastic bucket, and a ceramic planter base were collected from T-131.

Building materials including three brick fragments were collected from T-132. Household and personal items including a leather bag, a pre 1926 shoe (IMACS 1992), a possible planter fragment, a lauhala mat, as well as one item of unknown material, a milled wood disk, and a strap or handle were also collected.

A brick fragment was collected from T-133. Household and personal items, including a nail, three flower pot or planter base fragments, and one rim fragment, a ceramic marble, and a lid were collected from T-134. The lid was from a toothpaste jar with the words "Tooth Paste, The

Queen” “And preserving the teeth & gums; [Gosnell &] Co., London”; the trademark was used from 1853 to 1914 (Gosnell Org. 2013).

A shoe lacking nail holes, which indicates that it was glued and dates to post 1926 (IMACS 1992), was collected from T-136. A similar shoe was collected from T-137 with other personal and household items including a mother-of-pearl disk, a plastic soda bottle (PET-polyethylene terephthalate) with a screw-top that dates to 1973 (Wikipedia 2013c), a ceramic and metal fuse, and a flowerpot or planter fragment. Also collected from T-137 were a standard sized brick fragment that was manufactured between 1918 and 1978 (Meide 1994:25), and a metal machine part.

Personal items consisting of a marble was collected from T-138 and a bone toothbrush handle was collected from T-139. Construction and unknown materials were collected from T-141, including a brick fragment, composite fragments, small rocks, a metal fragment, and a plastic fragment.

A plastic fragment was collected from T-142. Artifacts/fragments collected from T-143 included construction materials, personal items, and household items. Construction materials consisted of a standard size brick fragment manufactured from 1918 to 1978 (Meide 1994:25), a milled plank fragment, three nails manufactured ca. 1850 to the present (IMACS 1992), metal sheathing, window glass fragments, and possible roof slate. Personal items included a leather children's shoe heel, and a porcelain button that has a metal shank instead of button holes; porcelain buttons date from 1850 to 1920 (IMACS 1992). Light bulb fragments and several unknown fragments of composite and metal material were also collected.

A bone toothbrush fragment was collected from T-148. Building materials including two brick fragments, one of which dates from 1886 to 1918 and the other ca. 1900 (Meide 1994:25), were collected with a ceramic marble from T-149. Three brick fragments, two of which date from 1918 to 1978 were collected from T-150. A similar brick fragment that dates to the same period was collected from T-151. A single window glass fragment was collected from T-152.

Table 112. West Kaka'ako, T-117, Miscellaneous Historic Artifacts

Acc. # 117-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
23	T-117, St. Ic	Brick	Composite	Complete	1	9.0 (L) x 7.0 (W) cm.	Composite material brick; textured surface with glazed face, dark brown
24	T-117, St. Ic	Brick	Brick	Fragment	4	--	3 fragments light brown in color; 1 frag dark brown
25	T-117, St. Ic	Nails and rusted chunks	Metal	Fragment	7	--	Nails and rusted chunks; 7 pieces
26	T-117, St. Ic	Pebble, rounded	Stone	Complete	1	1.5 (L) x 0.5 (W) cm.	Dark gray color
27	T-117, St. Ic	Pipe stem	Wood	Complete	1	4.5 (L) x 1.0 (W) cm.	Pipe stem
28	T-117, St. Ic	Plastic item	Plastic	Fragment	1	--	
29	T-117, St. Ic	Rubber type	Rubber	Fragment	1	--	
30	T-117, St. Ic	Sewer Pipe?	Ceramic	Fragment	1	--	Thick ceramic salt-glazed tubular fragment
31	T-117, St. Ic	Window glass	Glass	Fragment	2	--	

Table 113. West Kaka'ako, T-119, Miscellaneous Historic Artifacts

Acc. # 119-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
1	T-119 St. Ic	Brick		Fragment	6	N/A	Red color
2	T-119 St. Ic	Brick		Fragment	1	4 1/2 + x 4 1/4 x 2 1/2 in.	Red color, machine-made. Age: 1807-1860 (Meide 1994:25)

Table 114. West Kaka'ako, T-119A, Miscellaneous Historic Artifacts

Acc. # 119A-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
4	T-119A, St. Ib	Stone Block	Stone	Fragment	1	6.8+ (L) x 5.4 (w) x 4.0+ (T) cm.	Rectangular block; smooth outer surface
5	T-119A, St. Ic	Brick	Ceramic	Fragment	2	8 1/4 x 3 3/4 x 1 3/4 in.	Brick; reddish brown. Age: 1807-1860 (Meide 1994:25)

Acc. # 119A-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
6	T-119A, St. Id	Tag	Metal	Complete	1	5.1 (L) x 2.4 (W) x 0.1 (T) cm.	Thin rectangular metal plate with two holes; has a picture of a carriage and "FISHER" (post-1908) (Wikipedia 2013d)
7	T-119A, St. IIa	Cobble	Stone	Complete	1	4.0 (L) x 3.0 (W) x 0.5 (T) cm.	Waterworn cobble, tabular, polished; possible cobblestone or ballast stone?
8	T-119A St. IIa	Pebble, rounded	Stone	Complete	1	3.1 (L) x 2.8 (W) x 1.6 (T) cm.	Waterworn pebble, unpolished, round
9	T-119A, St. IIa	Pebble, rounded	Stone	Complete	1	3.2 (L) x 2.8 (W) x 0.4 (T) cm.	Waterworn pebble, slightly polished, oblate
10	T-119A, St. IIa	Stone/Marble mass	Stone	Fragment	1	--	

Table 115. West Kaka'ako, T-120, Miscellaneous Historic Artifacts

Acc. # 120A-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
1	T-120 St. Id	Brick		Fragment	2	N/A	red color
2	T-120 St. Id	Brick		Fragment	1	3 1/2 x 4 x 2 1/4 in.	red color, machine-made. Age: 1886 to 1918 (Meide 1994:25)

Table 116. West Kaka'ako, T-120A, Miscellaneous Historic Artifacts

Acc. # 120A-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
1	T-120A, St. II, Fea. 11, SIHP - 7428	Glass, worked	Glass	Fragment	1	5.3 (L) x 2.4 (W) cm.	Glass chipped for cutting edge; clear glass with straw-color tinge

Table 117. West Kaka'ako, T-121, Miscellaneous Historic Artifacts

Acc. # 121-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
5	T-121, St. Ic	Brick	Brick	Fragment	1	3.2 (L) x 6.2 (W) cm.	Red color throughout; machine molded
6	T-121, St. Ic	Insulator	Ceramic	Complete	1	5.0 (D) x 3.0 (H) cm.	White porcelain; hole in middle with metal; spindle shaped

Table 118. West Kaka'ako, T-121, Miscellaneous Historic Artifacts

Acc. # 121-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
2	T-122, St. Ie	Brick		Fragment	1	3+ x 3 3/4 x 2 1/2 in.	Red color, machine-made. Age: 1918 to 1978 (Meide 1994:25)

Table 119. West Kaka'ako, T-123, Miscellaneous Historic Artifacts

Acc. # 123-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
2	T-123, St. II, SIHP -2963	Insulator	Ceramic	Complete	1	4.1 (D) x 3.5 (H) cm.	White porcelain; large hole in top and small hole in bottom

Table 120. West Kaka'ako, T-124, Miscellaneous Historic Artifacts

Acc. # 124-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
6	T-124, St. Id	Brick	Brick	Fragment	1	4.2+ (L) cm.	Red interior, buff exterior, small fragment
7	T-124, St. Id	Nail	Metal	Fragment	1	5.1 (L) cm.	Too corroded to see cross-section shape
8	T-124, St. Id	Pipe Stem/Cigarette Holder	Bone	Complete	1	2.1 (L) x 1.0 (D) cm.	Carved hollow, polished bone with mouthpiece

Table 121. West Kaka'ako, T-125, Miscellaneous Historic Artifacts

Acc. # 125-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
16	T-125, St. Id	Earring, Hoop	Metal-Gold	Complete	1	2.2 (W) x 1.0 (T) cm.	Geometric pattern incised on surface
17	T-125, St. Id	Window glass	Glass	Fragment	1		
18	T-125 St. Id	Brick		Fragment	2	N/A	red color
19	T-125, St. Id	Unknown	Metal	Fragment	1	13.0 (L) x 0.9 (D) cm.	Tubular, heavy rod
20	T-125, St. Ie	Spoon	Metal	Complete	1	7.0 (L) x 2.5 (W) cm.	Simple - no decoration
21	T-125, St. Ie	Strap? Hinge?	Metal	Fragment	1	3.2 (L) cm.	
22	T-125, St. Ie	Wire	Metal	Fragment	1	3.4 (L) cm.	

Table 122. West Kaka'ako, T-126, Miscellaneous Historic Artifacts

Acc. # 126-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
8	T-126, St. Ic	Brick		Complete	1	8 x 3 3/4 x 2 1/2 in.	Red color, machine-made, rectangular. Age: 1918 to 1978 (Meide 1994:25)
9	T-126, St. Ic	Brick		Fragment	1	4+ x 4 x 2 1/4 in.	Red color, machine-made. Age: 1886 to 1918 (Meide 1994:25)
10	T-126, St. Ic	Spike	Metal	Fragment	1	8.5+ (L) cm.	

Table 123. West Kaka'ako, T-127, Miscellaneous Historic Artifacts

Acc. # 127-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
5	T-127, St. Ic	Pressed Glass	Glass	Rim Frag.	1	--	Lamp base? dish?, clear; stem & leaf pattern
6	T-127, St. Ic	Brick		Fragment	1	N/A x N/A x 3/4 in.	Red color, machine-made
7	T-127, St. Ic	Spade (Shovel)	Metal	Complete	1	54.0 (L) x 23.0 (W) x 0.5 (T) cm.	Spade and end hollow metal portion that goes over wooden handle
8	T-127, St. Ic	Nail	Metal	Fragment	1	3.9 (L) cm.	Corroded, head missing

Acc. # 127-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
9	T-127, St. Ic	Brick		Fragment	2	N/A	Red color
10	T-127, St. Ic	Strap/Hinge	Metal	Fragment	1	--	Corroded

Table 124. West Kaka'ako, T-129, Miscellaneous Historic Artifacts

Acc. # 129-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
7	T-129, St. II	Brick		Complete	1	8 x 3 3/4 x 2 in.	Red color, machine-made, rectangular
8	T-129, St. II	Brick		Fragment	1	4+ x 4 x 2 1/4 in.	Red color, trailings, possibly extruded. Age: 1886-1918 (Meide 1994:25)

Table 125. West Kaka'ako, T-130, Miscellaneous Historic Artifacts

Acc. # 130-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
20	T-130, St. Ii	Shoe, Human	Leather	Sole/ Heel	1	18.2 (L) x 5.0 (W) x 2.3 (T) cm.	Woman's or child's shoes; many holes for nails (ca. pre 1926; IMACS 1992)
21	T-130, St. Ii	Marble	Glass	Complete	1	1.9 (D) cm.	Blue opaque, pitted, with flat spots
22	T-130, St. Ii	Horseshoe	Metal	Complete	1	13.4 (L) x 12.2 (W) x 1.3 (T) cm.	

Table 126. West Kaka'ako, T-131, Miscellaneous Historic Artifacts

Acc. # 131-A-	Provenience	Type	Material	Portion	No..	Measurements	Description
15	T-131, St. Id	Bucket	Plastic	Complete	1	23.5 (H) x 22.0 (D) cm.	Bucket with metal handle; ACL "CA..."
16	T-131, St. Id	Planter	Ceramic	Base	1		Base fragment - brown slip glaze

Table 127. West Kaka'ako, T-132, Miscellaneous Historic Artifacts

Acc. # 132-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
53	T-132, St. Id	Brick		Fragment	1	3 1/2+ x 3 3/4 x 2 1/2 in.	Orange color, machine-made. Age: 1918-1978 (Meide 1994:25)
54	T-132, St. Id	Brick		Fragment	1	4 1/4+ x 3 3/4 x 2 1/2 in.	Red color, machine-made. Age: 1918-1978 (Meide 1994:25)
55	T-132, St. Id	Brick		Fragment	1	N/A x N/A x 2 1/2 in.	Red color, machine-made. Age: 1918-1978 (Meide 1994:25)
56	T-132, St. Id	N/A		Fragment	2	N/A	Not brick
57	T-132, St. Id	Bag	Leather	Complete	1	13.0 (L) cm.	Pinched and tied with string on each end
58	T-132, St. Id	Milled Wood Disk	Wood	Complete	1	14.0 (D) x 1.2 (T) cm.	Circular disk- unknown function
59	T-132, St. Id	Shoe, Human	Leather	Sole	1	16.8 (L) x 8.3 (W) x 0.3 (T) cm.	A few holes for nails (ca. pre 1926; IMACS 1992)
60	T-132, St. Id	Strap? Handle?	Metal	Complete	1	19.0 (L) x 2.2 (W) x 0.3 (T) cm.	Hole at end
61	T-132, St. Id	Planter?	Body	Fragment	1	--	Brown slip glaze
62	T-132, St. Id	Machine part - rod	Metal	Fragment	1	18.0 (L) x 0.3 (D) cm.	Solid tubular object - Unknown function
63	T-132, St. Ie	Unknown	Composite	Fragment	5	4.2+ (L) cm.	Wood and cloth; dyed red on exterior with mesh pattern
64	T-132, St. Ie/II	Lauhala mat	Lauhala	Fragments.	1	--	

Table 128. West Kaka'ako, T-133, Miscellaneous Historic Artifacts

Acc. # 133-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
4	T-133 St. Ic-Ig Backpile	Brick		Fragment	1	4 1/2+ x 3 1/2 x 2 in.	red color, machine-made

Table 129. West Kaka'ako, T-134, Miscellaneous Historic Artifacts

Acc. # 134-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
24	T-134, St. If	Toothpaste Jar Lid	Ceramic	Fragment	1		Transfer-print - Color version; Queen Victoria on lid, with words "Tooth Paste, The Queen" "And preserving the teeth & gums"; [Gosnell & Co., London" Mark used from 1853-1914 (Gosnell.Org 2013)
25	T-134, St. Ib	Flowerpot/planter	Ceramic	Rim	1		Rim fragment - glazed
26	T-134, St. Ic	Marble	Ceramic	Complete	1	--	Refined earthenware marble spattered and mottled with blue and yellow/brown glaze lead glaze
27	T-134, St. Ie	Flower pot/planter	Ceramic	Base	1		Base fragment - unglazed
28	T-134, St. If	Flower pot/planter	Ceramic	Base	1	5.0 (H) cm.	Base fragment - unglazed
29	T-134, St. If	Flowerpot/planter	Ceramic	Base	1		Base fragment - unglazed
30	T-134, St. Ib	Nail	Metal	Fragment	1	--	

Table 130. West Kaka'ako, T-136, Miscellaneous Historic Artifacts

Acc. # 136-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
3	T-136, St. Ih	Shoe, Human	Leather	Sole/Heel	1	20.5 (L) x 7.7 (W) x 0.3 (T) cm.	No holes for nails (glued; post 1926, IMACS 1992)

Table 131. West Kaka'ako, T-137, Miscellaneous Historic Artifacts

Acc. # 137-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
3	T-137, St. Ib	Flowerpot/ planter	Ceramic	Base to rim	1	12.5 (D) x 17.5 (H) cm.	Base to rim fragment - glazed with molded flutes
4	T-137, St. Ib	Brick		Fragment	1	3 3/4 x 3 3/4 x 2 1/4 in.	red color, machine-made. Age: 1918-1978 (Meide 1994:25)
5	T-137, St. Ib	Fuse	Composite	Fragment	1	--	Ceramic & metal
6	T-137, St. Ib	Mother-of- pearl disk	Shell	Complete	1	3.0 (D) cm.	Thin disk; unknown function
7	T-137, St. Ib	Soda bottle	Plastic	Complete	1	21.5 (L) cm.	White plastic screwtop; the PET bottle was patented in 1973 (Wikipedia 2013c)
8	T-137, St. Ib	Machine Part - Rod	Metal	Fragment	1	41.0 (L) x 5.5 (D) cm.	
9	T-137, St. Ib	Shoe, Human	Leather	Heel	1	7.1 (L) x 6.0 (W) x 1.8 (T) cm.	No holes along sides(glued; post 1926; IMACS 1992)

Table 132. West Kaka'ako, T-138, Miscellaneous Historic Artifacts

Acc. # 138-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
9	T-138, St. Ib	Marble	Glass	Complete	1	1.2 (D) cm.	White, purple and gray swirls

Table 133. West Kaka'ako, T-139, Miscellaneous Historic Artifacts

Acc. # 139-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
1	T-139, St. Ib	Toothbrush handle	Bone	Fragment	1	8.5 (L) x 1.0 (W) cm.	Polished bone

Table 134. West Kaka'ako, T-141, Miscellaneous Historic Artifacts

Acc. # 141-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
8	T-141, St. Id	Brick		Fragment	1	N/A x N/A x 2 3/4 in.	Red color, machine-made
9	T-141, St. II, Fea. 1	Unknown	Plastic	Fragment	1	--	Disc-shaped
10	T-141, St. II, Fea. 1	Unknown	Metal	Fragment	1	6.2 (L) x 1.8 (D) cm.	Corroded tubular item
11	T-141, St. III	Rock	Stone	Complete	1	--	Small rocks; dark brown, orange and grey in color

Table 135. West Kaka'ako, T-142, Miscellaneous Historic Artifacts

Acc. # 142-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
7	T-142, St. Ic	Unknown	Plastic	Fragment	1	2.0 (W) x 0.7 (T) cm.	

Table 136. West Kaka'ako, T-143, Miscellaneous Historic Artifacts

Acc. # 143-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
42	T-143, St. Id, Fea. 1	Brick		Fragment	1	5+ x 3 3/4 x 2 1/2 in.	Red color, machine-made. Age: 1918-1978 (Meide 1994:25)
43	T-143, St. Id, Fea. 1	Button	Porcelain	Complete	1	--	No holes, wire shank. Age: 1850 to 1920 (IMACS 1992)
44	T-143, St. Id, Fea. 1	Window glass	Glass	Fragment	11	--	
45	T-143, St. Id, Fea. 1	Light bulb, lamp	Glass	Fragment	4	--	
46	T-143, St. Id, Fea. 1	Milled plank	Wood	Fragment	1	--	Wood with nail
47	T-143, St. Id, Fea. 1	Nail	Metal	Fragment	11	--	Corroded, but probably wire nails/brads. Age: ca. 1850 to the present (IMACS 1992)
48	T-143, St. Id, Fea. 1	Nail, Wire	Metal	Complete	1	2.2 (L) cm.	Nail with flagging tape. Age: ca. 1890 to the present (IMACS 1992)

Acc. # 143-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
49	T-143, St. Id, Fea. 1	Nail/brad	Metal	Fragment	6	--	Corroded. Age: ca. 1850 to the present (IMACS 1992)
50	T-143, St. Id, Fea. 1	Pebble	Stone	Complete	1	2.1 (D) cm.	Oval pebble
51	T-143, St. Id, Fea. 1	Sheathing for unknown item	Metal	Fragment	2	--	Flat, thin, copper
52	T-143, St. Id, Fea. 1	Slate	Slate	Fragment	6	--	Roofing item?
53	T-143, St. Id, Fea. 1	Unknown	Composite	Fragment	3	--	Fused mass; charcoal, metal, etc.
54	T-143, St. Id, Fea. 1	Unknown	Metal	Fragment	5	--	Flat, corroded
55	T-143, St. III	Shoe - sole & heel	Leather	Fragment	1	14.0 (L) x 5.8 (W) x 0.2 (T) cm.	Heel not built-up; children's heel

Table 137. West Kaka'ako, T-148A Miscellaneous Historic Artifacts

Acc. # 148A-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
8	T-148A, St. Ib	Toothbrush Handle	Bone	Fragment	1	8.2 (L) x 1.8 (W) cm.	Flat on one side; convex on other; polished; hole at one end; incised circles near brush part

Table 138. West Kaka'ako, T-149, Miscellaneous Historic Artifacts

Acc. # 149-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
4	T-149 St., Ie	Brick		Fragment	1	2 1/2+ x 4 x 2 1/4 in.	Red color, machine-made. Age: 1886-1918 (Meide 1994:25)
5	T-149 St., Ie	Brick		Fragment	1	4+ x 4 x 2 1/2 in.	Red color, machine-made. Age: ca. 1900 (Meide 1994:25)
6	T-149, St. Ib	Marble	Ceramic	Complete	1	--	Red/ white

Table 139. West Kaka'ako, T-150, Miscellaneous Historic Artifacts

Acc. # 150-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
1	T-150, St. Ic	Brick		Complete	1	8 x 3 3/4 x 2 1/2 in.	Red color, machine-made, rectangular. Age: 1918-1978 (Meide 1994:25)
2	T-150, St. Ic	Brick		Complete	1	8 x 3 3/4 x 2 1/2 in.	Red color, machine-made, rectangular. Age: 1918-1978 (Meide 1994:25)
3	T-150, St. Ic	Brick		Fragment	1	2 3/4+ 3 3/4 x N/A in.	Red color, machine-made

Table 140. West Kaka'ako, T-151, Miscellaneous Historic Artifacts

Acc. # 151-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
1	T-151, St. IIa, Fea. 23	Brick		Fragment	1	3 1/2+ 3 3/4 x 2 1/2 in.	Red color, machine-made. Age: 1918-1978 (Meide 1994:25)

Table 141. West Kaka'ako, T-152, Miscellaneous Historic Artifacts

Acc. # 152-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
4	T-152, St. Ig	Window glass	Glass	Fragment	1		

4.11.4 Summary of Artifact Assemblage from Kaka'ako West

A large number of diverse types of historic artifacts were recovered from the Kaka'ako West area. Ceramics consisted of Asian wares and English Ironstone dinnerware fragments, some which could be dated to the 1835-1900 period. The bottles also fell within this period and some had an even narrower date range, from ca. 1880-1900. There were no machine-made bottles (post-1903). There were a few possible fragments indicating a free-blown or early dip-mold bottle, but in these cases the bottles seem to be English or European. As non-American companies did not switch over to new manufacturing methods as quickly as the highly competitive American/Canadian companies, these pontil/dip mold bottles may still date to the late nineteenth century. The collection contained a wide variety of patent medicine bottles, spirits bottles, beer bottles, soda bottles, beverage bottles, and non-food bottles. The bottles were made or filled for products in American, Scotland, the Netherlands, England, and as far away as Norway. The miscellaneous items represented a wide variety of domestic artifacts and construction material. Kaka'ako for a while was the great dumping ground and trash incinerator for the garbage produced within the Honolulu District, especially within the late nineteenth century and early twentieth century when a great push was made to fill in the former fishponds, saltponds, swamps, and low areas in preparation for the residential and commercial development of the area.

4.12 Artifact Analysis Kewalo (Test Excavations 162 to 178)

Historic Artifacts were recovered from T-164, T-165, T-167, T-167B, T-168B, T-169, T-171, T-172, T-172A, T-174, and T-178A. A total of 72 historic artifact fragments were collected, including 1 ceramic vessel fragment, 11 glass bottle/bottle fragments, and 60 miscellaneous items. Historic artifacts were found in a pit feature, designated SIHP # 50-80-14-7429, a ceramic insulator in T-167 Fea. 3, and marbles and other miscellaneous items in T-169, Stratum II.

4.12.1 Ceramics

One body fragment of dinnerware with white paste color, and lead transparent glaze with a white background was recovered from T-172A, Stratum Ic. The ceramic did not have any distinguishing design motif or markings

4.12.2 Bottles

T-164

One brown base/body fragment was recovered from T-164, Stratum Ie. The fragment was large enough to show that there were no mold seams, so it probably dates before 1920, when most bottles were made in a two-piece cup mold.

T-168B

One base fragment from a bottle was collected from T-168, Stratum Ic. The bottle was made by the Owens Glass Co., who used an O in a square base mark from 1911 to 1929 (Toulouse 1971:393).

T-171

One body bottle fragment from T-171, Stratum Ib/Ic was collected. The fragment is clear with a manganese tint, with some partial embossed words, probably a Honolulu soda works. The only Oahu bottle that matches the partial embossing is the Consolidated Soda Works of Honolulu (originally on Fort Street in downtown Honolulu), which was a merger of several bottlers founded in 1894 (Elliott 1971:250). The addition of manganese to clear glass was made from the 1870s to ca. 1913.

T-172

Three clear glass fragments, all part of a crown ABM lip, were found from T-172, Stratum Id. The ABM lip dates the bottle to post-1907.

T-172A

Five glass fragments from a minimum of two bottles, one of clear glass and one of olive glass from T-172A, Stratum Ic. All of the clear glass may belong to a bottle for Smile Soda, a brand for the Orange Smile Co., founded in the 1920s. This brand was bottled at the Sunrise Soda Water Works on Oahu, and later by the Seven-up Bottle Co. of Honolulu. The Sunrise Soda works was located in Kapālama from 1907 up to 1927 (Elliott 1971:31). The brand was later acquired by the Seven-up Company and bottled at their plant. In Millar's (1988: Oahu 241-245) book on machine-made Hawaiian sodas, several ACL label Smile bottles are dated to the 1950s and 1960s, suggesting the embossed types with crown lips are earlier, probably dating to the 1920s-1940s.

Table 142. Kewalo, T-172A, Ceramic Vessels

Acc. # 172A-A	Prov.	Type	Portion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decoration	Design Motif	Rim Motif	Comments
1	T-172A, St. Ic	Dinnerware	Body	1	Earthenware, Refined	White	Lead transparent	White	None	None	--	

Table 143. Kewalo, T-164, Glass Bottles

Acc. # 164-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-164, St. Ic	Bottle, Beverage	Base-body	1	--	--	Brown	5.0+	6.5	Round	No seams	pre-1920	dimple on base

Table 144. Kewalo, T-168B, Glass Bottles

Acc. # 168B - A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-168B, St. Ic	Bottle, Beverage	Base	1	--	--	Clear	--	--	--	-	1911-1929	"O" in square embossed on base; Owens Glass Co. mark, used 1911-1929 (Toulouse 1971:393)

Table 145. Kewalo, T-171, Glass Bottles

Acc. # 171-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-171, St. Ib/Ic	Bottle, Soda	Body	1	--	--	Clear	--	--	--	--	1890s-1913	"...ED/ ...ORKS CO/ 4" embossed on body horizontally; Manganese addition; (Consolidated Soda Works, Honolulu?)

Table 146. Kewalo, T-172, Glass Bottles

Acc. # 172-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-172, St. Id	Bottle	Neck- lip	3	Crown	ABM	Clear	--	--	--	2 pc.	1907- present	

Table 147. Kewalo, T-172A, Glass Bottles

Acc. # 172A-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
2	T-172A, St. Ic	Bottle, Soda	Body- lip	1	Crown	ABM	Clear	--	--	Round	2 pc. cup	1920s- 1940s	Bottle has textured patterns and has embossed "Smile" on both sides of body horizontally
3	T-172A, St. Ic	Bottle	Body	1	--	--	Olive	--	--	--	--		
4	T-172A, St. Ic	Bottle	Body	2	--	--	Clear	--	--	--	--	1870s- post	
5	T-172A, St. Ic	Bottle	Body	1	--	--	Clear	--	--	--	--	1870s- post	

4.12.3 Miscellaneous Historic Artifacts

Miscellaneous historic artifacts consisting primarily of building materials were collected from nine of the Kewalo test excavations.

A rail spike, possibly relating to the Honolulu streetcar system that operated from 1898 to 1933 (Simpson and Brizdle 2000:43, 124) and a deteriorated milled wood plank fragment were collected from T-164. A single corroded nail was collected from T-165 and two electrical insulators, one glass, the other composite were collected from T-167. One had an embossed B, the mark used by the Bushwick/Brookfield Co., which made insulators from 1864 to 1921 (Whitten 2013).

In addition to one machine cut tile, one marble and a bone toothbrush handle were collected from T-168B. Four marbles, three of which are clay were collected from T-169 with a worked glass fragment and an asphalt pavement fragment. One standard size brick fragment dating from 1886 to 1978 (Meide 1994:25) was collected from T-172. A total of 23 tiles, 13 whole and 10 fragments were collected from T-172A. One has a legible company name, Redondo, which is a Mexican company that has been making tile since the beginning of the nineteenth century. A single wire nail, manufactured ca. 1850 to the present (IMACS 1992), was also collected.

One brick with non-standard measurements was collected from T-174A, and a standard size brick dating from 1918 to 1978 was collected from T-178A.

Table 148. Kewalo, T-164, Miscellaneous Historic Artifacts

Acc. # 164-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
2	T-164, St. Ic	Spike, Rail	Metal	Fragment	1	22.5 (L) x 2.0 (D) cm.	Head broken off, round cross-section, end bi-tapered. Age: 1898-1933 (Simpson and Brizdle 2000:43, 124)
3	T-164, St. Ie	Milled plank	Wood	Fragment	1	13.1+ (L) x 2.5 (W) x 2.0 (T) cm.	Very deteriorated

Table 149. Kewalo, T-165, Miscellaneous Historic Artifacts

Acc. # 165-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
1	T-165, St. Id	Nail	Metal	Fragment	1	5.0+ (L) cm.	Too corroded to see cross-section shape

Table 150. Kewalo, T-167, Miscellaneous Historic Artifacts

Acc. # 167-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
1	T-167, St. IIa, Fea. 3, SIHP # 7429	Insulator	Glass	Fragment	2	--	Embossed "B" in center; Bushwick/Brookfield Glass Works, 1864-1921 (Whitten 2013)
2	T-167, St. Ig	Insulator	Composite	Fragment	1	3.1 (D) x 1.8 (H) cm.	Porcelain disc with perpendicular metal rod

Table 151. Kewalo, T-168B, Miscellaneous Historic Artifacts

Acc. # 168B-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
2	T-168B, St. Ic	Marble	Glass	Complete	1	2.1 (D)	White with yellow wavy lines
3	T-168B, St. Ic	Tile	Tile	Complete	1	5.5 (L) x 2.5 (W) x 1.1 (T) cm.	Curved tile; machine-cut on ends; impressed "N USA" on side
4	T-168B, St. Ic	Toothbrush handle	Bone	Fragment	1	9.5+ (L) x 1.1 (W) x 0.2 (T) cm.	Made of two layers of bone; hole in end

Table 152. Kewalo, T-169, Miscellaneous Historic Artifacts

Acc. # 169-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
1	T-169, St. II, SIHP # 7429	Marble	Glass	Fragment	1	--	Broken; green, opaque
2	T-169, St. II, SIHP # 7429	Marble	Clay	Complete	1	1.8 (D) cm.	Fairly round, light brown
3	T-169, St. II, SIHP # 7429	Marble	Clay	Complete	1	1.8 (D) cm.	Fairly round, pinkish brown
4	T-169, St. II, SIHP # 7429	Marble	Clay	Complete	1	2.0 (D) cm.	Red, one flattened end
5	T-169, St. II, SIHP # 7429	Glass, worked	Glass	Fragment	1	2.1+ (L) x 0.4 (W) x 0.3 (T) cm.	Worked on one edge, possibly for cutting; clear glass, does not look old
6	T-169, Id & Ie, Fea. 1	Asphalt Pavement	Composite	Fragment	1	13.5+ (L) x 4.5 (T) cm.	Asphalt with thin layer of concrete/mortar on both sides

Table 153. Kewalo, T-172, Miscellaneous Historic Artifacts

Acc. # 172-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
2	T-172, St. Id	Brick		Fragment	1	N/A x N/A x 2 1/4 in.	Red color, machine-made. Age: 1886-1978 (Meide 1994:25)

Table 154. Kewalo, T-172A, Miscellaneous Historic Artifacts

Acc. # 172A-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
6	T-172A, St. Ic	Tile	Tile	Complete	1	--	Grey-blue
7	T-172A, St. Ic	Tile	Tile	Complete	1	--	Beige
8	T-172A, St. Ic	Tile	Tile	Complete	1	--	Blue-green
9	T-172A, St. Ic	Tile	Tile	Complete	1	--	Gray-blue; corner piece

Acc. # 172A-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
10	T-172A, St. Ic	Tile	Tile	Complete	1	--	Five connected blue pieces on a large fragment of earthenware
11	T-172A, St. Ic	Tile	Tile	Complete	1	--	Beige tile; same size
12	T-172A, St. Ic	Tile	Tile	Complete	1	--	Blue glaze, rough texture
13	T-172A, St. Ic	Tile	Tile	Complete	1	--	Blue-gray glaze; underside of fragment has an "E" and other unidentifiable letters
14	T-172A, St. Ic	Tile	Tile	Complete	1	--	Blue-green glaze; Underside has two circular indentations and letters "NGA"
15	T-172A, St. Ic	Tile	Tile	Complete	1	--	Bluish-white glaze; Piece has triangular shape
16	T-172A, St. Ic	Tile	Tile	Complete	1	--	Light green glaze; Piece has lined pattern on underside and letter "A" on underside
17	T-172A, St. Ic	Tile	Tile	Complete	1	--	White glaze; tile surface has rough texture
18	T-172A, St. Ic	Tile	Tile	Complete	1	--	Yellow glaze; letters on underside of frag include "FRMOSA" "MARK"
19	T-172A, St. Ic	Tile	Tile	Fragment	2	--	Black glaze
20	T-172A, St. Ic	Tile	Tile	Fragment	1	--	Blue glaze; curved
21	T-172A, St. Ic	Tile	Tile	Fragment	8	--	Sample included 8 similar tile fragments, very pale blue; one piece includes letters "REDONDO / TRUSIZE"
22	T-172A, St. Ic	Tile	Tile	Fragment	8	--	Sample includes 8 similar tile fragments, light blue and white
23	T-172A, St. Ic	Tile	Tile	Fragment	1	--	Green glaze; fragment has curved up rim

Acc. # 172A-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
24	T-172A, St. Ic	Tile	Tile	Fragment	1	--	Gray glaze; tile surface has two-tone color and bumpy texture
25	T-172A, St. Ic	Tile	Tile	Fragment	1	--	Pale blue glaze; square shaped fragment
26	T-172A, St. Ic	Tile	Tile	Fragment	2	--	Light orange fragments, one has letters "RED" "TRU" on underside
27	T-172A, St. Ic	Tile	Tile	Fragment	2	--	White glaze
28	T-172A, St. Ic	Tile	Tile	Fragment	1	--	Yellow glaze
29	T-172A, St. Ic	Nail, Wire	Metal	Complete	1	5.5 (L) cm.	Round head. Age: ca. 1850 to the present (IMACS 1992)

Table 155. Kewalo, T-174A, Miscellaneous Historic Artifacts

Acc. # 174A--A-	Provenience	Type	Material	Portion	No.	Measurements	Description
1	T-174A, St. Ic	Brick		Fragment	1	5 1/2+ x 3 1/2 x 2 1/4	Red color, machine-made

Table 156. Kewalo, T-178A, Miscellaneous Historic Artifacts

Acc. # 178A-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
1	T-178A, St. Ic	Brick		Fragment	1	5+ x 3 3/4 x 2 1/4 in.	Red color, machine-made. Age: 1918 to 1978 (Meide 1994:25).

4.12.4 Summary of Artifact Assemblage from Kewalo

The artifact assemblage from the Kewalo area has only one ceramic fragment, perhaps reflecting the late development of this area as a residential area. Bottles generally are dated to the early twentieth century in the machine-blown era, which is in contrast to the Honolulu Waterfront area in which most bottles are mold-blown in the pre-1870s-1920s period. Much of this trash may result from commercial refuse, rather than domestic refuse.

4.13 Artifact Analysis for Kaka‘ako East (Test Excavations 179 -197)

Only two historic artifacts, both from T-196 were recovered from the nineteen test excavations in Kaka‘ako East.

4.13.1 Ceramics

No ceramic vessel fragments were recovered from Kaka‘ako East.

4.13.2 Bottles

T-196

Two bottle fragments, from an olive bottle and a clear milk bottle, were collected from the back-dirt pile of Stratum IIA for T-196. The clear milk bottle, with a capseat lip, probably post-dates the 1870s, based on the color.

4.13.3 Miscellaneous Artifacts

No miscellaneous artifacts were observed from Kaka‘ako East test excavations.

4.13.4 Summary of Artifact Assemblage from Kaka‘ako East

Only two historic artifacts were recovered from the Kaka‘ako East test excavations. One of the bottles could have been manufactured anytime after the 1870s.

4.14 Artifact Analysis for Kālia (Test Excavations 198 to 225)

Historic artifacts were collected from 6 of the 27 test excavations in Kālia, T-198, T-200, T-202, T-202A, T-203, and T-222. A total of 57 historic artifact fragments were collected, including 5 ceramic vessel fragments, 14 glass bottle/bottle fragments, and 38 miscellaneous items. Historic artifacts were collected from the Kewalo wetland sediments, designated SIHP # 50-80-14-6636, from T-198 St. II, T-200 St. II, T-202 St. II, and T-202A St. IIa. These artifacts dated from the late nineteenth century to the mid-twentieth century. Historic artifacts were recovered from T-214, Stratum IIa, an historic trash pit designated SIHP # 50-80-14-7193.

4.14.1 Ceramics

Three ceramic fragments from three vessels, one an English-made Ironstone were collected from T-202. One porcelain Asian rice bowl fragment was recovered from T-202A, Stratum Ie.

4.14.2 Bottles

T-200

One complete aqua spirits bottle was recovered from T-200, Stratum IIb. It has an applied lip and was made in a two-piece cup mold, dating it from the 1870s to the 1890s.

T-202

Eleven bottle/bottle fragments from ten bottles were collected from T-202. The bottles consist of four spirits bottles, two beverage bottles, one boot polish bottle, one teeth cleanser bottle, and two bottle fragments of unknown function. One boot polish bottle is for “Frank Miller’s Crown Dressing.” This same bottle was also found in T-129, T-132, and T-140 in the Kaka’ako West section. The popularity of this polish may be the result that it could not only be used to polish shoes and boots, but could also be used on leather harness for mules and horses. Rubifoam for the Teeth was introduced by E. W. Hoyt Co., of Lowell, Mass. in 1889 and was still advertised in 1925 (Fike 1987:65). Three bottles from T-202 have a tooled lip, used between 1870s to 1920, two clear bottles can be dated post 1870s, and two spirits mold-blown bottles with a beveled champagne lip finish can be dated to the 1880s to 1920s.

T-202A

One clear glass jar lip fragment was recovered from T-202A, Stratum Ie. The color dates this jar to the post-1870s.

T-214

Three glass jars were recovered from T-214, Stratum IIa, SIHP # 7193. The bottles were all machine-blown, with glass manufacturer marks dating the bottles to 1920-1963, 1938, and 1951.

T-222

One complete, clear glass milk bottle was collected from T-222. The bottle was used by the Honolulu Dairymen’s Company, and has a mark for the Owens-Illinois Glass Co., dating the bottle to 1933 or 1943.

Table 157. Kālia, T-202, Ceramic Vessels

Acc. # 202-A-	Prov.	Type	Portion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decoration	Design Motif	Rim Motif	Comments
1	T-202	Hollowware (English)	Base	2	Stoneware	Grey	Salt glaze	White	--	--	--	One fragment based has printed "PATENT I"
2	T-202	Hollowware (Asian)	Base	1	Porcelain	White	Lead transparent	Bluish white	None	--	--	Fragment has small section of red pattern, possibly hand-painted stamp with faded design on underside of piece
3	T-202	Hollowware	Body to rim	1	Porcelain	White	Lead transparent	Bluish white	Painted overglaze	Floral	None	Four Flowers motif; black, orange, red, yellow and green

Table 158. Kālia, T-202A, Ceramic Vessels

Acc. # 202A-A-	Prov.	Type	Portion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decoration	Design Motif	Rim Motif	Comments
1	T-202A, St. Ie	Hollowware - bowl (Asian)	Base to rim	1	Porcelain	Grey	Lead transparent	Blue-gray	Painted underglaze	Floral	Banded	Bamboo Pattern

Table 159. Kālia, T-200, Glass Bottles

Acc. # 200-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-200, St. IIb, SIHP # 6636	Bottle, Spirits	Complete	1	Brandy	Applied	Aqua	31.0	7.5	Round	2 pc. cup	1870– 1890	"A" on base (on base)

Table 160. Kālia, T-202, Glass Bottles

Acc. # 202-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
4	T-202, St. II, SIHP # 6636	Bottle, Beverage	Body	2	--	--	Amber	--	--	Round	--		
5	T-202, St. II, SIHP # 6636	Bottle	Body	1	--	--	Aqua	9.5+	4.0	--	--		
6	T-202, St. II, SIHP # 6636	Bottle, Boot polish	Complete	1	Patent	Tooled	Clear	12.5	4.5 x 4.5	Square	2 pc. cup	1870s- 1900	Frank Millers Crown Dressing New York, USA” - embossed horizontally on body; “25” - embossed on base (Edwards & Critten 1885:146)
7	T-202, St. II, SIHP # 6636	Bottle, Medicine	Complete	1	Patent	Tooled	Clear	10.0	2.5 x 5.5	Rectan gular	2 pc. cup	1887- 1920s	“Rubifoam for the teeth by E.W. Hoyt & Co. Lowell, Mass” - embossed horizontally on body; introduced in 1887
8	T-202, St. II, SIHP # 6636	Bottle, Beverage	Shoulder- lip	1	Brandy	Tooled	Clear	13.5	7.0	Round	2 pc. cup	1880s- 1920s	
9	T-202, St. II, SIHP # 6636	Bottle	Body	1	--	--	Clear	--	--	--	--	1870s- post	

Acc. # 202-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
10	T-202, St. II, SIHP # 6636	Bottle, Spirits	Lip	1	Champa gne	Tooled	Green	--	--	--	--	1880s- 1920s	
11	T-202, St. II, SIHP # 6636	Bottle, Beverage	Base- body	1	--	--	Olive	9.5+	6.5	Round	No seams	pre- 1921	Push-up base
12	T-202, St. II, SIHP # 6636	Bottle, Beverage	Base- body	1	--	--	Olive	6.0+	6.0	Round	No seams	pre- 1920	Push-up base
13	T-202, St. II, SIHP # 6636	Bottle, Spirits	Complete	1	Champa gne	Tooled	Green	25.5	7.0	Round	Turn	1880s- 1920s	Base: kick-up

Table 161. Kālia, T-202A, Glass Bottles

Acc. # 202A-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
2	T-202A, St. Ie	Jar, Food	Lip	1	Ext. thread	--	Clear	--	--	Round	--	1870s- post	Wide-mouthed jar

Table 162. Kālia, T-214, Glass Bottles

Acc. # 214-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-214, St. IIa, SIHP # -7193	Jar, Cosmetic	Complete	1	Ext. Thread	ABM	White			Oval	2-pc. cup	1920- 1964	Hazel-Atlas Glass Co. Woodbury Co.
2	T-214, St. IIa, SIHP # -7193	Jar, Sauce	Complete	1	Ext. Thread	ABM	Clear			Oval	2-pc. cup	1938	Owens-Illinois Glass Co.
3	T-214, St. IIa, SIHP # -7193	Jar	Complete	1	Ext. Thread	ABM	Clear			Oval	2-pc. cup	1951	Owens-Illinois Glass Co.

Table 163. Kālia, T-222, Glass Bottles

Acc. # 222-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-222, St. Ic	Bottle, Milk	Complete	1	Capseat	--	Clear	25.0	10.0	Round	2 pc. cup	1933 / 1943	ACL "Honolulu Dairymen's Co. Owens-Illinois date code base mark

4.14.3 Miscellaneous Historic Artifacts

Miscellaneous historic artifacts consisting primarily of building materials with some personal items were collected from six of the Kālia test excavations. A milled wood plank fragment was collected from both T-198 and T-200.

Numerous pieces of metal and milled wood were recovered from the privy in T-202. One machine-headed cut nail was pried from one section of the privy wood. These types of nails generally date from 1835 to 1890, although some are still made today (Middle Tennessee State University 2002).

A standard sized brick dating from 1886 to 1918 (Meide 1994:25), an un-worked basalt cobble, lumber fragments, and metal slag, with two household/personal items including a possible copper spoon and a bone toothbrush were collected from T-202A. In the Market Street Chinatown Archaeological Project, San Jose, Calif. (Stanford Archaeological Center 2003), American/European toothbrushes had holes in the head that did not go all the way through, while Asian toothbrushes had holes that did go all the way through the bone head so that bristles could be removed and replaced. The toothbrush in T-202A had non-through holes, suggesting that it was of American/English manufacture. A single leather shoe sole lacking nail holes, indicating it was made post 1926 (IMACS 1992), was collected from T-203. Fragments collected from T-202 consisted solely of building materials: stone material, seven metal fragments, four of which are machine parts, a possible leather insulation item, and two milled blocks of wood.

Table 164. Kālia, T-198, Miscellaneous Historic Artifacts

Acc. # 198-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
1	T-198, St. II, SIHP # 6636	Milled plank	Wood	Fragment	1	21.1+ (L) x 7.5 (W) x 2.3 (T) cm.	

Table 165. Kālia, T-200, Miscellaneous Historic Artifacts

Acc. # 200-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
2	T-200, St. IIb, SIHP # 6636	Milled plank	Wood	Fragment	3	30.0+ (L) x 4.7 (W) x 2.3 (T) cm.	Burnt wood

Table 166. Kālia, T-202, Miscellaneous Historic Artifacts

Acc. # 202-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
14	T-202, St. II, SIHP # 6636	Milled block	Wood	Fragment	1	7.5 (l) x 2.1 (W) x 1.3 (T) cm.	
15	T-202, St. II, SIHP # 6636	Insulation item?	Leather	Fragment	1	--	
16	T-202, St. II, SIHP # 6636	Building material	Stone	Fragment	1	7.0 (L) cm.	Mortar on surface
17	T-202, St. II, SIHP # 6636	Machine part - ring	Metal	Fragment	1	4.2 (D) cm.	Recessed interior
18	T-202, St. II, SIHP # 6636	Housing Box?	Metal	Fragment	1	4.5 (L) x 2.0 (W) cm.	Thin plates bent into an open box-shape
19	T-202, St. II, SIHP # 6636	Machine part - rod & wheel	Metal	Fragment	1	5.5 (D) cm.	Wood at base
20	T-202, St. II, SIHP # 6636	Machine part - ring	Metal	Fragment	3	2.9 (D) cm.	Thin metal
21	T-202, St. II, SIHP # 6636	Housing Metal?	Metal	Fragment	4	--	Thin curved plates
22	T-202, St. II, SIHP # 6636	Machine part - wire	Metal	Fragment	1	--	White with knobs on each end
23	T-202, St. II, SIHP # 6636	Machine part - attachment	Metal	Fragment	1	2.1 (L) cm.	

Acc. # 202-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
24	T-202, St. II, SIHP # 6636	Nail	Metal	Complete	1		Machine-headed cut nail (1835-1890)
25	T-202, St. II, SIHP # 6636	Milled planks	Wood	Fragment	1	--	

Table 167. Kālia, T-202A, Miscellaneous Historic Artifacts

Acc. # 202A-A	Provenience	Type	Material	Portion	No.	Measurements	Description
3	T-202A, St. Ie	Cobble	Basalt	Complete	1	8.0 (L) x 5.0 (W) x 4.0 (T) cm.	No evidence of being worked or being fire affected
4	T-202A, St. Ie	Lumber	Wood	Fragment	5	--	5 pieces of lumber
5	T-202A, St. Ie	Metal slag	Metal	Fragment	1	3.0 (L) x 2.0 (W) x 0.5-1.0 (T) cm.	T-202A, Str. Ie
6	T-202A, St. Ie	Spoon	Metal	Complete	1	14.4 (L) x 3.3 (W) x 0.2 (T) cm.	Rusty; green due to oxidation; possible copper?
7	T-202A, St. Ie	Toothbrush	Worked bone	Complete	1	13.5 (L) x 1.0 (W) x 0.3 (T) cm.	Slight tapered head; 19 x 4 & 2 rows of bristles; holes do not go all the way through brush head
8	T-202A, St. IIa, SIHP # 6636	Brick		Fragment	1	5+ x 4 x 2 1/4 in.	Black, cinder, machine-made. Age: 1886-1918 (Meide 1994:25)

Table 168. Kālia, T-203, Miscellaneous Historic Artifacts

Acc. # 203-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
1	T-203, St. Ig	Shoe, Human	Leather	Heel/Sole	1	29.5 (L) x 9.5 (W) x 0.3 (T) cm.	No holes for nails (glued; post 1926, IMACS 1992)

Table 169. Kālia, T-214, Miscellaneous Historic Artifacts

Acc. # 214-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
4	T-214, St. IIa, SIHP # -7193	Tile	Ceramic / mortar	Fragment	1	4.7-(L) x 4.7-(W) x 1.3 (T) cm.	12 tiles in one section
5	T-214, St. IIa, SIHP # -7193	Tile	Ceramic	Fragment	1	10-x-10-x-1 cm.	
6	T-214, St. IIa, SIHP # -7193	Tile	Ceramic	Fragment	1	10-x-10-x-1 cm.	

4.14.4 Summary of Artifact Assemblage from Kālia

Artifacts from T-200 and T-202 have mold-blown bottles manufactured from the late nineteenth to early twentieth century. T-202A has a brick dating from 1886-1918. The material in these three test excavations dates from the end of the nineteenth to the first two decades of the twentieth century. In contrast, a machine-blown bottle from T-222 is dated to 1933 or 1943.

4.15 Artifact Analysis for Kaka‘ako Makai (Test Excavations 226A to 232A)

Historic artifacts were collected from 9 of the 16 test excavations in Kaka‘ako Makai. A total of 256 historic artifact fragments were collected, including 92 ceramic vessel fragments, 96 glass bottle/bottle fragments, and 68 miscellaneous items. Historic artifacts were collected from an A-horizon, designated SIHP 50-80-14-2918, from T-226D Fea.28, and T-227 Fea. 14, and Fea 17. A narrow date range for these artifacts could not be determined.

4.15.1 Ceramics

T-226B

Seven fragments from two ceramic vessels were recovered from T-226B, Stratum II, part of a stoneware bottle and a porcelain plate with an Anglo/American blue-shell edged rim.

T-226D

Ten fragments of eight vessels were collected from T-226D, Strata Ib and III, a Bristol-glazed stoneware bottle (Anglo/American made), a yellow stoneware crock, three different earthenware vessels, and three Asian porcelain dishes. One of the earthenware vessels has a decoration made of a cut sponge stencil, also called Scottish Sponge ware, which was usually made in Great Britain. The three Asian porcelains, one with a “Four Flowers” motif, two fragments of one vessel with a “Sweet Pea” motif, and one fragment with a “Bamboo” motif, all have motifs found on Chinese Tz‘u wares commonly found in archaeological deposits from nineteenth century Overseas Chinese communities (Lebo 1997 Appendix G:14-15).

T-227

Fifty-three (53) ceramic fragments from a minimum of eight vessels were collected from T-227, Stratum II. Eight fragments are from one or more stoneware bottles. Thirty of these fragments are from white earthenware dinnerware. There is one possible sponge-ware fragment, mainly made in Great Britain, but some of the fragments may be Asian in origin.

T-227A

Six ceramic fragments from four vessels were collected from T-227A, Stratum Id. The small fragments were mainly white, and origin of the wares could not be determined.

T-231A

Eleven ceramic fragments from six vessels were collected from T-231A, Stratum Ig. One ceramic plate made in England was dated to 1873-1907 and one fragment had the Asian Bamboo motif.

T-232

Two ceramic fragments from two vessels were collected from T-232, Stratum II. One is a celadon bowl with an Asian character on the base and one is an Asian painted overglaze bowl with a Four Flowers motif.

T-232A

Three ceramic fragments from three vessels were recovered from T-232A, Stratum Ie. These are an English-made stoneware ink bottle, a porcelain teapot, and an earthenware flatware made by an English pottery between 1853-1871 (Stoke-on-Trent 2013).

Table 170. Kaka'ako Makai, T-226B, Ceramics

Acc. # 226B -A-	Prov.	Type	Portion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decor-ation	Design Motif	Rim Motif	Comments
1	T-226B, St. II	Flatware – Plate (Anglo / American)	Rim (2); Body (3)	5	Earthenware, Refined	White	Lead Trans-parent	White	Painted under-glaze	None	Molded - shell-edged	Blue color on rim interior
2	T-226B, St. II	Bottle	Body	2	Stoneware	Reddish Brown	Unglazed	Red-brown	None	None	--	

Table 171. Kaka'ako Makai, T-226D, Ceramics

Acc. # 226D -A-	Prov.	Type	Port-ion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decoration	Design Motif	Rim Motif	Comments
1	T-226D, St. Ib	Bottle (Anglo/ American)	Base	1	Stoneware	Buff	Slip glaze	Tan	None	None	--	Two-tone Bristol-Glaze stoneware bottle; 1835-1900
2	T-226D, St. Ib	Dinnerware (Asian)	Base	1	Porcelain	Gray	Lead transparent	Off-white	Painted overglaze	Floral	--	Four Flowers motif
3	T-226D, St. Ib	Unknown	Body	2	Earthenware, Coarse	Brown	Unglazed	Brown	--	--	--	
4	T-226D, St. Ib	Unknown	Body	1	Stoneware	Tan	Slip glaze	Tan	--	--	--	Possible bottle fragment
5	T-226D, St. Ib	Dinnerware	Body	1	Earthenware, Refined	Off-white	Lead transparent	White	--	--	--	

Acc. # 226D-A-	Prov.	Type	Portion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decoration	Design Motif	Rim Motif	Comments
6	T-226D, St. Ib	Dinnerware (Asian)	Body	2	Porcelain	Off-white	Lead transparent	Bluish white	Painted underglaze	Swirls	--	Sweet Pea motif
7	T-226D, St. Ib	Dinnerware (Great Britain)	Body	1	Earthenware, Refined	Off-white	Lead transparent	White	Cut sponge, painted underglaze	Floral	--	Green, red, and yellow flowers (interior)
8	T-226D, St. Ib	Dinnerware (Asian)	Rim	1	Porcelain	Off-white	Lead transparent	Bluish white	Painted underglaze	Floral	None	Bamboo motif
9	T-226D, St. III	Crock	Rim	1	Stoneware	Yellow	Lead transparent	Yellow	--	--	None	

Table 172. Kaka'ako Makai, T-227, Ceramics

Acc. # 227-A-	Prov.	Type	Portion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decor-ation	Design Motif	Rim Motif	Comments
1	T-227, St. II	Dinnerware	Body	30	Earthenware, Refined	White	Lead transparent	Off-white	None	None	--	From one large vessel, possibly with a handle
2	T-227, St. II	Bottle	Body	8	Stoneware	Grey	Slip glaze	Brown	None	None	--	
3	T-227, St. II	Crock?	Body	8	Stoneware	Buff	Lead transparent	Yellow	None	None	--	
4	T-227, St. II	Crock?	Body	1	Stoneware	Buff	Lead transparent	Yellow	None	None		yellow on both sides

Acc. # 227-A-	Prov.	Type	Portion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decor-ation	Design Motif	Rim Motif	Comments
5	T-227, St. II	Dinner-ware	Rim	1	Porcelain	White	Lead transparent	White	Painted underglaze	Floral	Floral/banded	Shard interior has blue flowers or stars around rim and exterior has blue floral garland, above it is a blue banded, braided pattern consisting of circles and ovals
6	T-227, St. II	Dinner-ware	Body	1	Porcelain	Buff	Lead transparent	White	Painted underglaze	Circle	--	three green circles
7	T-227, St. II	Dinner-ware (Great Britain)	Body	1	Porcelain	White	Lead transparent	White	Cut Sponge, painted underglaze	Floral	--	blue and pink floral pattern, sponged and painted
8	T-227, St. II	Dinner-ware	Body & rim	3	Porcelain	White	Lead transparent	White	--	--	None	

Table 173. Kaka'ako Makai, T-227A, Ceramics

Acc. # 227A-A-	Prov.	Type	Portion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decor-ation	Design Motif	Rim Motif	Comments
1	T-227A, St. Id	Dinner-ware	Base	2	Porcelain	White	Lead transparent	White	Painted underglaze	--	--	
2	T-227A, St. Id	Flat-ware	Rim (1); body (2)	3	Earthenware, Refined	White	Lead transparent	Off-white	Transfer-print	Floral	Floral	
3	T-227A, St. Id	Dinner-ware	Body to rim	1	Porcelain	White	Lead transparent	White	Painted underglaze	Floral?	Floral?	Unknown pattern on fragment and rim

Table 174. Kaka'ako Makai, T-231A, Ceramics

Acc. # 231A-A	Prov.	Type	Portion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decor-ation	Design Motif	Rim Motif	Comments
1	T-231A, St. Ig, SIHP - 7189	Flatware - plate	Body	1	Earthenware, Refined (Ironstone)	White	Lead transparent	White	None	None	--	Printed on base" [Royal Seal] / [IR]ONSTONE GEORGE JONES & SONS / ENGLAND"; 1873-1907; England in mark used after 1891 (Stoke-on-Trent 2013)
2	T-231A, St. Ig, SIHP - 7189	Dinnerware	Body	1	Porcelain	White	Lead transparent	White	--	--	--	Fragment with broken handle end
3	T-231A, St. Ig, SIHP - 7189	Unknown	Body	1	Earthenware, Coarse	Buff	Unglazed	Red-Brown	None	None	--	Slightly curved, so not from a flowerpot
4	T-231A, St. Ig, SIHP - 7189	Dinnerware	Body	1	Porcelain	White	Lead transparent	White	Painted underglaze	Banded ?	--	Blue band, possibly near rim
5	T-231A, St. Ig, SIHP - 7189	Hollowware (Asian)	Body to rim	1	Porcelain	Off-white	Lead transparent	Bluish white	Painted underglaze	Floral	Geo-metric	Bamboo Motif

Acc. # 231A-A	Prov.	Type	Portion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decor- ation	Design Motif	Rim Motif	Comments
6	T-231A, St. Ig, SIHP - 7189	Crock	Body (5); rim (1)	6	Stoneware	Buff	Slip glaze	Brown, dark	None	None	Thickened	

Table 175. Kaka'ako Makai, T-232, Ceramics

Acc. # 232-A-	Prov.	Type	Portion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decor- ation	Design Motif	Rim Motif	Comments
1	T-232, St. II, -7189	Dinnerware (Asian)	Body	1	Porcelain	White	Lead transparent	White	Painted overglaze; gilded	Floral	--	Green stem, red base; chrysanthemum/ gilded; possibly Four Flowers motif
2	T-232, St. II, SIHP -7189	Hollowware - bowl (Asian)	Base to rim	1	Porcelain	White	Lead opaque	Celadon green	None	None	None	Blue Asian character on base

Table 176. Kaka'ako Makai, T-232A, Ceramics

Acc. # 232A-A	Prov.	Type	Portion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decor- ation	Design Motif	Rim Motif	Comments
1	T-232A, St. Ie, SIHP - 7189	Bottle, Stoneware, Ink (English, 1891-1956)	Base to shoulder	1	Stoneware	Buff	Slip	Brown	None	None	--	Impressed mark on heel, "DOULTON/ LAMBETH"; mark used 1891-1956 (Godden 1989:214); 18.0 (H) x 7.5 (D)

Acc. # 232A-A	Prov.	Type	Portion	No.	Paste	Paste Color	Glaze	Color (Bkg)	Decor- ation	Design Motif	Rim Motif	Comments
2	T- 232A, St. Ie, SIHP - 7189	Tea pot	Base to rim	1	Porcelain	Reddish brown	Slip glaze	Brown/Green	--	--	None	"t" etched on base
3	T- 232A, St. Ie, SIHP - 7189	Flatware (English)	Body	1	Earthenware, Refined (Ironstone)	Off- white	Lead trans- parent	White	None	None	--	Blue stars on base. Trademark: "Warran[ted]/ Ironstone [China] used by Elsmore & Forster ca. 1853- 1871 (Stoke-on- Trent 2013)

4.15.2 Bottles

T-226A

One aqua bottle fragment was recovered from T-226A, Stratum Ic. It has a slightly rounded bottom similar to soda bottles shown in Elliott and Goulds' (1978: see page 112-113 for examples) book on early Hawaiian soda bottles dating to the 1880s to 1910s.

T-226C

Two bottle fragments from two bottles, one aqua and one dark olive were recovered from T-226C, Stratum Id Backdirt Pile. The aqua bottle was from the Consolidated Soda Water Works Co., Ltd., of Honolulu. The embossing style on the body indicates that it was bottled in ca. 1900-1909 (Elliott and Gould 1978:80).

T-226D

One dark olive bottle neck fragment was collected from t-226D, Stratum Ib. The lip had an applied finish, meaning that it was manufactured from 1820-1890.

T-227

Fifteen glass fragments from a minimum of six bottles were collected from T-227, Stratum Ic (1 bottle), Stratum II (3 bottles), Stratum II – Feature A (1 bottle), and Stratum II – Feature B (1 bottle). The olive bottle fragment in Stratum Ic did not have any seams, probably a bottle made in a turn mold (pre-1920). A clear glass body fragment in Stratum II can be dated to the post-1870s based on color. Three clear bottle fragments from Stratum II are from a milk bottle embossed with the name “Yamashita”. A similar milk bottle was found in the East Kapālama test excavation T-061. As previously noted, K. Yamashita is recorded as a dairy farmer as early as 1911 (Hawaii. Board of Health 1911:149; also mentioned in Hawaii. Board of Health 1928:56), and later had a dairy in Kapahulu called the New Fair Dairy, which is listed in a 1940 Hawaiian directory (Polk-Husted 1940:471). Five bottle fragments from a mold-blown olive bottle, made in a two-piece mold, date to the post-1870s -1920s period. No dating information could be determined for the olive bottle fragment from Feature A or the light brown bottle fragment from Feature B.

T-227A

Thirteen glass fragments from a minimum of five bottles were collected from T-227A, Stratum Id. They consist of a round black glass base and a lip/neck (possibly from the same bottle), a clear bottle fragment (dated post 1870s based on color), a light green bottle fragment, a dark olive bottle with a round base (5 fragments), a dark olive bottle with a square base, and three dark olive body fragments that could be part of the round or square base bottle. Based on color, the clear bottle fragments can be dated to the post-1870s, and the black bottle fragments can be dated to the pre-1890s. In addition, the black lip fragment has an applied finish, used from 1820 to 1890. The light green and dark olive fragments cannot be dated. The round base dark olive bottle has embossed letters, but only a few letters remain and it is difficult to determine the full name. If it is an American-made bottle, it probably post-dates the 1860s, as embossing was not common on the body of the bottles until this time. The black bottle with a square base is a case gin bottle with an open pontil. As mentioned previously, American bottle with a pontil usually pre-date 1850. However, in other countries bottles, especially case gin bottles from

countries such as the Netherlands, continued to be free-blown into the early decades of the twentieth century.

Nine fragments of six individual glass bottles were collected from T-227A from Stratum IIa. Five fragments were "black glass," which was usually produced in America before the 1890s (SHA/ BLM 2013). Two base fragments also have a rough surface, possibly a glass pontil, indicating that the bottles were entirely mouth-blown (not blown in a mold). In America, mold-blown bottles generally replaced mouth-blown bottles by the 1850s; however, other countries continued to make mouth-blown bottles until the late nineteenth century (SHA/ BLM 2013). Since the origin of the black bottles is unknown, we can only date them to the pre 1890s. One dark olive bottle has some embossing on the body, which was not common on the body portion of American-made bottles until the 1860s (SHA/ BLM 2013). Thus, the Zone 2 collection probably dates from the 1860s to the 1890s. Both Stratum Id and Stratum IIa have possible pontiled bottles, thus there is no evidence that the Id fill layer is later than Stratum IIa.

T-231A

Nine bottle/bottle fragments from nine individual bottles were recovered from T-213A, Stratum Ig. The bottles are comprised of: one black, four dark olive, and one olive spirits bottle; one clear Codd soda bottle; one light green medicine (pill/aspirin) bottle, and one clear medicine bottle. The Hollister & Co. soda bottle is a Niagara type bottle, with a Codd marble stopper-type closure. This bottle dates to ca. 1893 (Elliott and Gould 1978:113). The top of the bottle is broken off, as children broke the bottle in order to get to the marble inside. The two medicine bottles can be dated to the post-1870s to 1920s period based on the two-piece mold and lip finish. The spirits bottles can be dated based on a combination of their attributes, their color, mold type, and lip finish. The six spirits bottles are dated to 1860-1920 (4), 1860-1890 (1), and 1880-1920 (1).

T-232

Three bottle fragments from three bottles were collected from T-232, Stratum II, a trash layer. The bottles consist of an aqua medicine vial, a brown beer bottle, and a neck-lip of an olive spirits bottle. The beer bottle can be dated to the post-1870s period, based on the two-piece cup mold, and the olive spirits bottle can be dated to the 1880s-1920s period, based on the tooled lip finish.

T-232A

Seven bottle fragments from seven bottles were collected from T-232A, Stratum Id. There is a brown bourbon bottle fragment (1860s post based on embossing), a black spirits bottle (1820-1890, based on applied lip finish), a clear medicine vial (post 1860s based on clear color), a clear medicine bottle (post-1860s), a possible clear bulk ink bottle (post-1860s), and two green spirits bottles. The embossed brown bourbon bottle fragment spells out "Bourbon" and possibly "Louisville, Ky." There were once numerous bourbon distilleries in Kentucky. The partial letters on the bottle fragment could not be identified to a specific word or brand name. The green spirits bottles are from W. E. Johnson Co., Liverpool, England, a bottler established in 1874, mainly for beer (including Guinness Beer), but also for other spirits brands and mineral waters (Hughes 2006:132). The bottles were made by Nuttal & Co., which used an N & Co. base mark until 1913 (Whitten 2013).

Table 177. Kaka'ako Makai, T-226A, Glass Bottles

Acc. # 226A-A	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-226A, St. Ic	Bottle, Soda	Body	1	--	--	Aqua	--	--	--	--		Round bottom

Table 178. Kaka'ako Makai, T-226B, Glass Bottles

Acc. # 226B-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
3	T-226B, II	Bottle,	Body	1	--	--	Aqua	--	--	--	--		Small fragment
4	T-226B, II	Bottle,	Body	1	--	--	Clear	--	--	--	--		Small fragment

Table 179. Kaka'ako Makai, T-226C, Glass Bottles

Acc. # 226C-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
1	T-226C, Backpile, St. Id	Bottle, Soda	Base-neck	1	--	--	Aqua	19.5+	5.7	--	2 pc. cup	1900-1909	Embossed on body horizontally: "CONSOLIDATED / SODA / WATER WORKS CO. / LIMITED / HONOLULU / HI"; on base "C. S.W. W. CO."
2	T-226C, Backpile, St. Id	Bottle	Body	1	--	--	Olive, Dark	--	--	--	--		

Table 180. Kaka'ako Makai, T-226D, Glass Bottles

Acc. # 226D-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
10	T-226D, St. Ib	Bottle	Neck-lip	1	Brandy	Applied	Olive, Dark	--	--	--	--	1820–1890	

Table 181. Kaka'ako Makai, T-227, Glass Bottles

Acc. # 227-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
9	T-227, St. Ic	Bottle	Base	1	--	--	Olive	--	--	Round	No seams	pre-1920	Push-up
10	T-227, St. II	Bottle, Milk	Body	3	--	--	Clear	--	--	--	--	1870s-post	"HA" / "PROPERT[Y]" / "K. YAMASH" / "PHO" embossed horizontally on body; other two shards have no embossing
11	T-227, St. II	Bottle	Body	1	--	--	Olive	--	--	Square / rectangular	--		3 embossed letters on fragment, two are cut off and one is a "T" (NET?)
12	T-227, St. II	Bottle, Spirits	Body-4, base (1)	5	--	--	Olive	--	7.5	Round	2 pc. cup	1870s-1920s	"N" embossed on base; push-up
13	T-227, St. II, Fea. 14, SIHP # 2918-	Bottle	Body	1	--	--	Olive	--	--	--	--		
14	T-227, St. II, Fea. 16 SIHP # 2918-	Bottle	Body	4	--	--	Brown, Light	--	--	--	--		

Table 182. Kaka'ako Makai, T-227A, Glass Bottles

Acc. # 227A -A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
4	T-227A, St. Id	Bottle, Beverage	Base	1	--	--	Black	--	7.8	Round	--	pre-1890s	Push-up
5	T-227A, St. Id	Bottle, Gin	Base	1	--	--	Olive, Dark	6.0+	7.5	Square	--	1920s-pre	Open Pontil Case Gin
6	T-227A, St. Id	Bottle, Beverage	Neck-lip	1	Double ring	Applied	Black	--	--	--	No seams	pre-1920	
7	T-227A, St. Id	Bottle	Body	1	--	--	Clear	--	--	--	--	1870s-post	
8	T-227A, St. Id	Bottle	Body	1	--	--	Green, Light	--	--	--	--		
9	T-227A, St. Id	Bottle, Beverage	Body	3	--	--	Olive, Dark	--	--	--	--		
10	T-227A, St. Id	Bottle, Beverage	Base	5	--	--	Olive, Dark	--	7.0	Round	--	ca. 1860s-post	One piece has letters "AIT", second piece has unidentifiable letters/ design; ...ALTT...KL...
11	T-227A, St. II	Bottle, Spirits	Base	2	--	--	Black	--	--	Round	--	pre-1890s	
12	T-227A, St. II	Bottle, Spirits	Base	2	--	--	Black	--	8.0	Round	--	pre-1890s	
13	T-227A, St. II	Bottle, Spirits	Base	1	--	--	Black	--	7.5	Round	--	pre-1890s	

Acc. # 227A-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
14	T-227A, St. II	Bottle	Body	1	--	--	Olive, Dark	--	--	Round	--	1860s-post	Embossed with a "...LE" vertically on the body
15	T-227A, St. II	Bottle	Body	1	--	--	Olive, Dark	--	--	Square / rectangular	--		
16	T-227A, St. II	Bottle	Body	2			Amber	--	--	--	--	--	

Table 183. Kaka'ako Makai, T-231A, Glass Bottles

Acc. # 231A-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
7	T-231A, St. Ig, SIHP -7189	Bottle, Spirits	Complete	1	Brandy	Applied	Olive	24.2	5.1	Round	Turn	1860–1890	
8	T-231A, St. Ig, SIHP -7189	Bottle, Spirits	Complete	1	Brandy	Applied	Olive, Dark	25.0	5.7	Round	Turn	1860–1890	
9	T-231A, St. Ig, SIHP -7189	Bottle, Spirits	Complete	1	Brandy	Applied	Olive, Dark	24.1	6.0	Round	Turn	1860–1890	
10	T-231A, St. Ig, SIHP -7189	Bottle, Spirits	Complete	1	Brandy	Applied	Olive, Dark	24.2	6.4	Round	Turn	1860–1890	

Acc. # 231A-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
11	T-231A, St. Ig, SIHP -7189	Bottle, Medicine	Complete	1	Patent	Tooled	Green, Light	13.5	4.9 x 2.4	Rectangular	2 pc. cup	1870s-post	
12	T-231A,	Bottle, Spirits	Complete	1	Brandy	Tooled	Black	23.4	6.1	Round	Turn	1860-1890s	
13	T-231A, St. Ig, SIHP -7189	Bottle, Spirits	Complete	1	Blob	Tooled	Olive, Dark	24.2	6.3	Round	Turn	1880s-1920s	
14	T-231A, St. Ig, SIHP -7189	Bottle, Soda	Base-neck	1	--	--	Green, light	21.0	6.0	Round	2 pc. cup	1893 ca.	Niagara Codd bottle; top broken to get marble; embossed on body in double arch "HOLLISTER / 7 CO / HONOLULU / HI: embossed on heel "...MAKERS / LONDON." (Elliott & Gould 1978:113)
15	T-231A, St. Ig, SIHP -7189	Bottle, Medicine	Complete	1	Rolled	--	Clear	10.9	4.0	Round	2 pc. cup	1870s-1920s	Possible pill/aspirin bottle

Table 184. Kaka'ako Makai, T-232, Glass Bottles

Acc. # 232-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
3	T-232, St. II, SIHP # 7189	Bottle, Beer	Base-shoulder	1	--	--	Brown	--	6.0	Round	2 pc. cup	1870s-post	Suction mark on base
4	T-232, St. II, SIHP # 7189	Bottle, Spirits	Neck-lip	1	Double ring	Tooled	Olive	--	--	--	--	1880s-1920s	
5	T-232, St. II, SIHP # 7189	Vial, Medicine	Base-neck	1	--	--	Aqua	5.3+	2.5 x 1.0	Rectangular	Turn	1860-1920s	Dimple

Table 185. Kaka'ako Makai, T-232A, Glass Bottles

Acc. # 232A-A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
4	T-232A, St. Id	Bottle, Medicine	Complete	1	Patent	Tooled	Clear	13.0	4.0	Square	2 pc. cup	1870s-post	"T" embossed on base
5	T-232A, St. Id	Bottle, Ink?	Complete	1	Patent	Tooled	Clear	18.5	7.5	Round	2 pc. cup	1870s-post	
6-7	T-232A, St. Id	Bottle, Beverage	Complete	2	Champagne	--	Green	25.3	7.0	Round	2 pc. cup	1874-1913	"Johnson Liverpool, Trademark Registered"—picture of a sun or star - embossed horizontally on body; "N & Co" embossed on base; kick up base; Nuttal & Co. mark pre-1913 (Whitten 2013)
8-9	T-232A, St. Id	Bottle, Spirits	Complete	2	Brandy	Applied	Black	20.0	6.5	Round	Turn	1820–1890	Dimple

Acc. # 232A -A-	Prov.	Type	Portion	No. frag	Lip Type	Lip Finish	Color	Ht. (cm)	Di. (cm)	Base Shape	Mold	Age	Comments
10	T- 232A, St. Id	Bottle	Stopper	1	--	--	Clear	5.0	2.5 x 1.0	Diamond	2 pc. cup	1870s- post	
11	T- 232A, St. Id	Bottle, Bourbon	Body	1	--	--	Brown	--	--	--	--	1860s- post	1 piece reads ERS....URBON....ILLE... KY

4.15.3 Miscellaneous Historic Artifacts

Miscellaneous historic artifacts consisting primarily of building materials and personal items were collected from six of the Kaka'ako Makai test excavations (Table 186 to Table 193).

A post 1849 Prosser button (IMACS 1992) and a brick fragment were collected from T-226A. One complete standard sized brick dating from 1978 to the present (1994), and four brick fragments, two of which have standard sizes that match the complete brick and one that appears to date from 1807 to 1860 (Meide 1994:25), were collected from T-226D.

One of the three bricks collected from T-227 may have a mold mark. Other building material from T-227 included an asphalt brick fragment, a piece of ceramic, possible stone roofing tile, a rail spike that dates from the late nineteenth century to the mid-twentieth century, a possible corroded spike, metal piping, and a corroded nail. Personal items that were collected included an ivory bead, a glass button with no holes and a wire shank, a rubber comb or hair ornament, glass marble fragments, and a glass candle stick holder.

A non-standard size machine-made brick, window glass, and compressed charcoal for drawing were collected from T-231A. A flaked piece of chert was also found in T-231A; chert was utilized in the early post-Contact period as ship ballast as well as for strike-a-lights (Goodwin and Allen 2005:67).

Personal items including a clay marble and a cut strip of abalone shell were collected from T-232. Several fragments including a leather strap, a glass lamp, and a pavement block, and a complete lid were collected from T-232A. The toothpaste jar lid is similar to the Gosnell & Co. London "Cherry Toothpaste" lid collected from T-134 in the West Kaka'ako zone, although it is a dark green monochrome version that was used from ca. 1880-1900 (Stoke-on-Trent 2013). Two small red brick fragments were collected from T-226B, Stratum II.

Table 186. Kaka'ako Makai, T-226A, Miscellaneous Historic Artifacts

Acc. # 226A-A	Provenience	Type	Material	Portion	No.	Measurements	Description
2	T-226A, St. Ib	Brick		Fragment	1	N/A	2 brick frags adhered by mortar, yellow/orange color, sand, possibly hand-made
3	T-226A, St. Ic	Button, Prosser	Ceramic	Complete	1	1.9 (D) x 2.0 (T) cm.	4-holes. Age: post 1849 (IMACS 1992)

Table 187. Kaka'ako Makai, T-226B, Miscellaneous Historic Artifacts

Acc. # 226B-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
5	T-226B, St. II	Brick		Fragment	1	N/A	Red, no sides to measure

Table 188. Kaka'ako Makai, T-226C, Miscellaneous Historic Artifacts

Acc. #226C-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
3	T-226C, Id, Backdirt	Brick		Fragment	3	N/A	Red, no sides to measure

Table 189. Kaka'ako Makai, T-226D, Miscellaneous Historic Artifacts

Acc. # 226D – A-	Provenience	Type	Material	Portion	No.	Measurements	Description
11	T-226D, St. Ib, Fea. 28, SIHP - 2918	Brick		Complete	1	9 x 4 1/2 x 2 1/2 in.	Yellow color, machine-made, fire brick, rectangular. Age: 1978 to present (Meide 1994:25)
12	T-226D, St. Ib, Fea. 28, SIHP - 2918	Brick		Partial	1	6 1/2+ x 4 1/2 x 2 1/2 in.	Yellow color, machine-made, fire brick. Age: 1978 to present (Meide 1994:25)
13	T-226D, St. Ib, Fea. 28, SIHP - 2918	Brick		Fragment	1	5+ x 4 1/4 x 2 1/2 in.	Yellow brown color, machine-made, fire brick.

Acc. # 226D – A-	Provenience	Type	Material	Portion	No.	Measurements	Description
14	T-226D, St. Ib, Fea. 28, SIHP - 2918	Brick		Fragment	1	6+ x 4 1/2 x 2 1/2 in.	Yellow brown color, machine-made, fire brick
15	T-226D, St. Ib, Fea. 28, SIHP -	Rail Beam	Metal	Fragment	1	40.2+ (L) x 3.5 (W) by 4.0 (T) cm.	Streetcar or railroad rail beam
16	T-226D, St. Ib, Fea. 28, SIHP -	Spike	Metal	Complete	1	9.8 (L) x 1.0 (D) cm.	Round head, not tapered
17	T-226D, Sr. Ic	Brick		Fragment	1	N/A	Red color

Table 190. Kaka‘ako Makai, T-227, Miscellaneous Historic Artifacts

Acc. # 227-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
15	T-227, St. II	Spike?	Metal	Fragment	1	9.2 (L) cm.	Very corroded
16	T-227, St. II	Spike, Rail	Metal	Complete	1	12.0 (L) x 1.7 (D) cm.	Bi-tapering, broken head
17	T-227, St. II	Utility Pipe?	Metal	Fragment	1	14.5 (L) cm..	Very corroded
18	T-227, St. II	Roofing tile?	Stone	Fragment	1	1.3 (T) cm.	
19	T-227, St. II	Tile	Ceramic	Body	1		White glazed Tile
20	T-227, St. II	Marble	Glass	Fragment	2	1.8 (D) cm.	Opaque & clear
21	T-227, St. II	Button	Glass	Complete	1	0.7 (D) cm.	No holes, wire shank
22	T-227, St. II	Comb	Celluloid	Fragment	1	5.2 (L) x 3.2 (W) cm.	Long tines, poss. a hair ornament rather than a true comb
23	T-227, St. II	Asphalt/Brick	Composite	Fragment	20	--	Small fragments
24	T-227, St. II	Brick		Fragment	5	N/A	Red color
25	T-227, St. II	Brick		Fragment	1	3 1/2+ x 3 3/4 x 2 in.	Red color, machine-made
26	T-227, St. II	Brick		Fragment	1	3+ x 3 1/4 x 2 in.	Red color, possible mold mark, raised lip

Acc. # 227-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
27	T-227, St. II, Fea. 14, SIHP -2918	Nail	Metal	Fragment	1	4.0 (L) x 0.5 (D) cm.	Too corroded to see cross-section shape
28	T-227, St. II, Fea. 17, SIHP -2918	Candle Stick Holder?	Glass	Complete	1	5.0 (L) x 4.0 (W) x 3.0 (T) cm.	Floral pattern
29	T-227, St. II, Fea. 17, SIHP -2918	Bead	Ivory	Complete	1	4.7 (L) x 1.7 (W) cm.	Ivory bead, possibly necklace

Table 191. Kaka'ako Makai, T-231A, Miscellaneous Historic Artifacts

Acc. # 231A-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
16	T-231A, St. Ig, SIHP # 7189	Box Lid - Asian	Soapstone?	Complete	1	19.5 (L) x 9.5 (W) x 2.0 (T) cm.	
17	T-231A, St. Ig, SIHP # 7189	Possible lamp base	Ceramic	Fragment	1		--
18	T-231A, St. Ig, SIHP # 7189	Insulator	Glass	Fragment	2		
19	T-231A, St. Ig, SIHP # 7189	Brick		Fragment	1	4 1/4+ x 3 1/2 x 2 in.	Red color, machine-made
20	T-231A, St. Ig, SIHP # 7189	Tubular item	Charcoal	Fragment	1	6.5+ (L) x 1.0 (D) cm.	Compressed solid tube; for drawing?
21	T-231A, St. Ig, SIHP # 7189	Window	Glass	Fragment	6	N/A	Window glass fragments
22	T-231A, St. Ib/Ic	Chert	chert	Flake/piece	1	28.5 (L) x 22 (W) x 10.0 (T) cm.	Cortex on edge of chert. Chert was ship ballast and strike-a-lights in the early post-Contact period (Goodwin and Allen 2005:67)

Table 192. Kaka'ako Makai, T-232, Miscellaneous Historic Artifacts

Acc. # 232-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
6	T-232, St. II, SIHP # 7189	Marble	Clay	Complete	1	1.4 (D) cm.	Tan color, polished
7	T-232, St. II, SIHP # 7189	Shell, Abalone	Shell	Fragment	1	1.7+ (L) cm.	Cut into thick strip & polished on 3 sides; Unknown decorative function

Table 193. Kaka'ako Makai, T-232A, Miscellaneous Historic Artifacts

Acc. # 232A-A-	Provenience	Type	Material	Portion	No.	Measurements	Description
13	T-232, St. II, SIHP # 7189	Straps - Harness?	Leather	Fragment	4	25.0 (L) x 3.8 (W) x 2.0 (T) cm.	
14	T-232, St. II, SIHP # 7189	Lamp fragment?	Glass	Fragment	1	8.1 (L) x 2.0 (D) cm.	
15	T-232, St. II, SIHP # 7189	Pavement Block?	Stone	Fragment	1	12.5 (L) x 4.0 (W) x 2.0 (T) cm.	
16	T-232, St. II, SIHP # 7189	Lid	Ceramic	Complete	1		Toothpaste jar - transfer-print - Monochrome version (dark green); Trade [Mark] / John Ed[wards] c. 1880-1900. Flatware "Cherry Toothpaste Patronized by the Queen for beautifying and Preserving the Teeth and Gums By John Gosnell & Co. London (Stoke-on-Trent 2013)

4.15.4 Summary of Artifact Assemblage from Kaka'ako Makai

The artifact assemblage from Kaka'ako Makai is similar to the Kaka'ako West material, and different from the Kewalo and Kālia areas. It is comprised of late nineteenth early-twentieth century (ca. 1870s-1920) bottles blown in the mold-blows era. Some trenches may have even early free-blown bottles. The ceramics are a mixture of European and Asian nineteenth century wares. One of the interesting miscellaneous items is a spike and a portion of the track that may be part of the old 1898-1933 Honolulu streetcar system.

4.16 Honolulu District Historic Artifacts

4.16.1 Previous Honolulu District Archaeological Studies Historic Artifact Analyses

A number of studies of recovered historic artifacts have been written for archaeological projects in the Honolulu and Kakaʻako area, discussed below for project generally west to east, from Honolulu to Kakaʻako and Kālia.

In the River-Nimitz project (Landrum and Dixon 1992), both early pontiled bottles and later mold-blown bottles were found. The deposits at this site terminated around 1900, when many buildings were razed after the 1900 Chinatown fire destroyed most of the western section of Honolulu. For the ceramics, the researchers noted that European and Oriental wares were found most often in pre-1865 features, and American wares most common after the end of the Civil War in 1865 (Hurst 1992:13-14).

In the Chinatown area, between River and Kekaulike Streets, two city blocks have been investigated. In the Ewa block, between Kekaulike and River, a wide variety of artifacts were recovered, with bottles dating from 1800 to 1940.

The Diamondhead block of the Kekaulike project (between Kekaulike and Maunakea streets), had deposits that were dated to six time periods: Pre-Human (before BP 2000), Pre-Contact (from Hawaiian colonization to A.D. 1778), from Contact to the Māhele (1778-1850), Early Chinatown (1850 to the 1900 Chinatown fire), Growth and Stabilization (1900-1950) and the Modern Era (post 1950). Some early Chinese ceramic wares were found in the pre-1850 deposits, but the main bulk of the artifact assemblage was associated with the Early Chinatown deposits. Both Chinese and Japanese wares were found; however, the Japanese "Dashed Line" transfer-prints were not found (Goodwin and Allen 2005:236-244).

In the Ewa block of the Kekaulike project ceramics were dominated by nineteenth century Asian wares but some Western wares were also found. One early pontil lip, dated to 1780-1800 was found, but most of the bottles were mold-blown from the mid-nineteenth century to the 1920s. One section of the project was a former fishpond, filled in with soil and trash from the mid-to-late nineteenth century (Kennedy et al. 1994:1350-137, 142).

The Marin Tower project was another study with a wide time period of use, from ca. 1810 to the present. In the 1810 to 1850 period, European wares dominated. In the 1850-1900 period, the presence of Chinese merchants was mirrored in the artifact collection, as Chinese medicine bottles and ceramics were found (Goodwin et al. 1996:359-362). Historic artifacts were also found in the post-1900 period, but the artifacts are not summarized as a whole, but rather mentioned for a variety of features in several blocks.

For the Chinatown Gateway Plaza, on the corner of Bethel and Hotel streets, twenty-five bottles were recovered, all dating from the 1880s to 1920. Similar to many of the test excavations for the HHCTCP project, there were no early free-blown bottles and no machine-blown bottles, indicating that trash-fills were most common in the decades around the turn of the century. Many of the bottles were liquor bottles. Ceramics were briefly described as a mixture of Western/Asian wares (Pantaleo 1988:10-13).

For the 800 Nuʻuanu Block at Nuʻuanu between Marin and Smith streets (Lebo and McGuirt 2000a, 2000b), a wide variety of bottle and ceramic from the early nineteenth century into the

twentieth century were recovered. In the cultural zone from 1810 to 1830, white earthenwares, olive green bottles, and handmade bricks were found. In the 1830s-1860s cultural zone, English earthenwares and Asian porcellaneous stoneware and porcelains predominated. Some pontilled and snap case bottles were also found. In the 1860s-1890s cultural zone, turn mold bottles were the most common type, which the ceramic collection was dominated by English refined earthenware ironstones and Chinese ceramics. In the 1890s-present zone, mold-blown bottles were still found (Lebo and McGuirt 2000b:85, 114-117, 141, 161-162).

The most extensive study of historic artifacts in the Honolulu area was the study of Harbor Court (first called Nuuanu Court) on the corner of Bethel and Queen Streets (Hurst and Allen 1992; Lebo 1997; Lebo 2002). Development in this area began in the 1790s and early mold-blown bottles, early ceramics such as tin-glazed earthenwares, creamwares, pearlwares, transitional whitewares, were found, and brick foundations dating from 1820-1890 were observed (Hurst and Allen 1992:88). During data recovery at this area found a blending of Hawaiian culture and foreign residents in the types and modifications of traditional and Western goods. Most of the ceramics date from ca. 1762-ca. 1900. Free-blown and mold blown bottles dating to ca. 1900 (Lebo 1997:73-74, 89) were recovered. In addition, buttons, beads, tobacco pipes, pencils, cutlery, gunflints, building stone, window glass, nails, and other construction material was also collected and analyzed.

Some early studies included brief discussions of historic artifacts from the Kaka'ako area. In 1986, ceramics and bottles observed during monitoring for the Judiciary Parking Garage on Pohukiana and South streets (Athens 1986) were briefly described. In the fill layers, 1890s to 1920s blob top bottles and post-1903 ABM bottles were found. In 1987, historic artifacts were found during the construction of the Makai Parking Garage on Punchbowl and Halekauwila streets. Twenty-five bottles and bottle fragments were recorded in a fishpond fill layer, mainly dating from 1880-1910, but with some dating early in the nineteenth century. Fishponds in the Kaka'ako area were filled in between 1901 to 1912 (Clark 1987:117). During monitoring for the Judiciary site in 1988 on South Street between Halekauwila and Reed Lane, 1880s-1920s embossed bottles and turn mold-bottles were found. The majority of the ceramics were Asian rather than European. In recent years, more extensive studies have been conducted in the Kaka'ako area. In one block between Pohukaina, Halekauwila, Keawe, and South St., numerous bottles were found during excavations at the Block 2 Parking Lot. Most of the bottles are mold-blown and date to the 1880s to 1920s periods, but there was also an admixture of twentieth century machine-made ABM bottles. European ceramic wares, including ironstones, and Chinese ceramic wares, with the Bamboo, Four Seasons, Four Floers, and Double Happiness, were also common (Pammer et al. 2011:256, 271).

4.16.2 Summary of Historic Artifact from the HHCTCP Project

There were mainly two types of historic deposits for the test excavations in the HHCTCP project. In the Kalihi and Iwilei sections, fill layers had bottles dating to the 1930s-1940s exclusively. This is probably an indication of the late development of these areas in the expansion of the urban area of Honolulu. In the Honolulu Waterfront and Kaka'ako areas, test excavations were mainly fill layers with trash from the late nineteenth century to the early twentieth century. Bottles usually dated from the 1870s to the 1920s, within the mold-blown period. There was only one definite free-blown bottle (pre-1850 period) with a pontil, but it was

probably made in a European factory, which were much slower to abandon the older manufacturing techniques than American and Canadian companies. In these deposits, there are also usually no machine-blown bottles (post-1920s). The lag between the manufacturing time of the bottles and their discard may be from 5 to 10 years. The ceramics in these test excavations mirror the bottle results. While some of the European-made more expensive ceramics had early manufacturing dates, these types of wares may have been passed down through generations, and may have a long deposition lag between the manufacturing date, through the purchase and use date, until they were finally discarded. This is probably not as true for the inexpensive mass-produced Chinese painted wares and Japanese transfer-prints, which were easily broken and may have had a short deposition lag, possibly around 10 years from the time of manufacture to the time of discard. Most of the trash probably represents domestic refuse. In the Honolulu Waterfront section, there were a lot of spirits (ale, whiskey, beer) bottles, possibly from nearby hotels or bars. Some of the European ceramics were for a durable earthenware, called Ironstone, that was also mainly purchased for hotels and restaurants. Thus some of the trash from this area may be from commercial establishments, rather than family residences.

In the Iwilei section, near the former OR&L railroad terminal building, several rail spikes, probably part of the old railroad tracks were found. In the Kewalo area, a part of a track and a spike were also found. In this case, the rail may be part of the Honolulu streetcar system, that operated from 1898 to 1933. Much of the construction debris, nails, bricks, milled wood, etc. is probably also the result of some commercial enterprise, as the Honolulu area, especially before the 1900 Chinatown fire, was a mixture of commercial and residential buildings. Before and especially after the fire, industries and residences began to move into the Kaka'ako area to the east. To develop this area, people were encouraged to take their trash and fill in former ponds and swamps. Large sections of Kaka'ako were also used for open-air trash burning. In the Kālia area, some test excavations have only post-1920s material, indicating the late commercial development of this area. There are also test excavations with the same type of 1870s-1920s artifacts as the Kaka'ako area, either from nearby domestic refuse, from open-air burning, or the use of trash to fill in this former swampy land.